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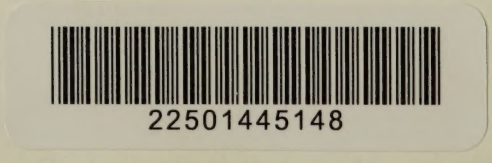

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PROVINCIAL
MEDICAL & SURGICAL JOURNAL.

REPORT OF THE COMMITTEE

APPOINTED AT THE

ANNIVERSARY MEETING

OF THE

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION,

Held at Norwich, August 19th and 20th, 1846,

"To enquire whether any and what alteration is required or desirable in the General Publications of the Association."

TO THE COUNCIL OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

Gentlemen,—The Committee appointed at the Annual Meeting of the Provincial Medical and Surgical Association, held at Norwich, in August last, for the purpose of enquiring "whether any and what alteration is required or desirable in the General Publications of the Association," having devoted considerable attention to the subject, and obtained the opinions of many influential members of the Association, think it proper to make a Report to you, founded upon the information so obtained, in order that if deemed advisable, the alterations they are desirous of suggesting may come into force, with the commencement of a new volume in 1847.

Your Committee, deeply sensible of the importance of the duties entrusted to them, and the essential influence which the decision at which they may arrive must have upon the interests of the Association, have divided the object of their enquiries into two parts.

I. As to the propriety of making any change in the *form* and *period of publication* of the *Journal* and *Transactions*.

II. As to the best means of giving the highest possible character to the literature of the Association.

To the first question, upon which your Committee have obtained considerable information, representing the opinions of a large portion of the members of the Association,* they will confine themselves upon the present occasion, reserving the second question for farther deliberation and a second Report on or before the Annual Meeting to be held at Derby, in 1847.

In commencing their remarks, your Committee are desirous of expressing in the strongest terms the high opinion they entertain of the able manner in which the present Editor of the *Provincial Medical and Surgical Journal* has performed the duties entrusted him.

They wish it expressly to be understood that if any fault is to be found with that publication, they consider it arises from the paucity of materials at his command, and the necessary limit of space and matter which the funds of even so large an Association, must enforce in the present form of the *Journal*, and your Committee feel that they are only acting with bare justice to Dr. Streeten, in stating that he has placed the Association under considerable obligation; not only by the ability which he has displayed, but for the gentlemanly tone and highly honourable feeling which he has at all times evinced as Editor of the Society's Publications.

That some alteration, however, is absolutely necessary in the arrangement of the Society's Publications, the opinion of the members who have communicated with the Secretary to your Committee has been unanimously in the affirmative. As might have been expected among so large a body, some difference of opinion exists as to the best method of effecting that change. An analysis of the letters received by the Secretary, shews the following result:—

To discontinue the Journal	2
To publish the Journal weekly	3
To publish the Journal fortnightly, double its present size, with an annual supplement	13
To publish the Journal monthly	3
To establish a Quarterly Journal in lieu of the present publications	2
Total	23

Of the above number, twenty expressed a desire that the "Transactions" should be discontinued as an annual volume;—two that they should be continued as at present; and one gentleman

* Each correspondent with the Committee is considered to have obtained and expressed not only his own, but the opinion of the Associates in his neighbourhood.

advised the discontinuance of the Journal, and the publication of a volume of "Transactions," as at present.

Upon the opinions expressed and the various proposals made by the above gentlemen your Committee would remark :—

I. It is quite impossible to throw any additional force into the Publications of the Society, if the present arrangements continue, because the expenses already incurred, are fully as large as the funds of the Society will admit.

In any alteration, *a saving of expense must be held in view*, to enable the Council to expend the money or a portion of the sum so saved, in obtaining Reports, Essays, Extracts from Foreign Journals, and Papers upon various subjects connected with Medical Science, for insertion in the new publications of the Society.

II. A discontinuance of the Journal would, in the opinion of your Committee, be a most unwise proceeding, and highly prejudicial to the interests of the Society, comprising as it does so large a proportion of Provincial Practitioners in Medicine and Surgery, whose means of obtaining practical information is very great, and whose ability to make that information available to the general body of subscribers is undoubted; your Committee consider, that the Society should not only publish a Journal, but that it should hold a position not inferior to any other similar publication in the United Kingdom.

III. In considering the form of the Society's Publications, it is important to bear in mind the facilities of transmission through the Post to the most remote rural districts.

A Monthly or Quarterly Journal, however, in many respects desirable, could only be issued either through local Secretaries or London booksellers, to both of which means there are the objections of additional expense and much trouble to those gentlemen who already devote considerable time to the affairs of the different Branches of the Association, and it would be impossible by either plan to ensure that regularity in delivery, which is so *important a feature* in periodical literature.

IV. All of the above objections would be obviated by publishing the Journal double its present size once a fortnight, and transmitting it as at present, through the Post. By this change £200 a year would be saved in stamps alone.

With regard to the "Transactions," your Committee are fully sensible of the many valuable papers already published in them by the Society, but they consider that the necessity of their publication is very much lessened by the probability of a discontinuance of the Retrospective Addresses, in consequence of this division of medical literature being now occupied by the excellent publications of Dr. Ranking and Mr. Braithwaite. At the same time your Committee are fully sensible of the probability of papers coming into the hands of the Council, that could only appear in a volume of "Transactions," which though discontinued as an annual publication, might from time to time appear, according to the discretion of the Council.

Considering then the questions submitted to them in all their bearings, and consulting as far as possible the best interests of the Society and the high position it has to maintain in the medical literature of the United Kingdom, your Committee have come to the following resolutions, which they beg to submit to the consideration of the Council.

I. That the "Transactions" of the Provincial Medical and Surgical Association, be discontinued as an annual publication, but appear according to the discretion of the Council, as occasion requires.

II. That the *Provincial Medical and Surgical Journal* be published once a fortnight.

III. That the Journal be increased to double its present size, and that an Annual Supplement be published as soon after the general meeting as possible.

IV. That the most active and energetic measures be adopted to raise the character of the Journal as a medium of conveying PRACTICAL and USEFUL information, and that as one means of attaining this object, a Sub-Editor, with a commensurate salary be appointed.

J. G. CROSSE,
President of the Association.
CHARLES HASTINGS, M.D.,
President of the Council.
EDMUND LYON, M.D.
W. H. RANKING, M.D.
C. M. DURRANT, M.D.
RICHARD CHAMBERS, M.D.
T. HERBERT BARKER, M.B.
PETER MARTIN
W. NEWNHAM
JOHN S. SODEN
JAMES MACKNESS, M.D.
WILLIAM BUDD, M.D.
THOMAS RADFORD, M.D.
C. R. BREE, Secretary to the Committee.

At a meeting of the Central Council held on Friday, December the 18th, 1846, the Report of the Committee appointed at Norwich, to consider the publications of the Association, and several letters forwarded with the Report by Mr. Bree, the Secretary to the Committee, were laid before the Council.

The Council having taken the foregoing

Report and documents accompanying it into consideration, think it right immediately to adopt the recommendations of the Committee, and begin the publication of the Journal fortnightly, at the commencement of the year 1847.

The Council also fully concur in the propriety of the recommendation of the Committee, that a Sub-Editor be appointed, but think it most respectful to the Association to leave that appointment to be filled up at the General Meeting at Derby, having full confidence that the Editor of the Journal will in the mean time make such arrangements for its improvement as circumstances seem to call for.

CHARLES HASTINGS, M.D.

(*Published by order of the Council.*)

A COURSE OF LECTURES ON CLINICAL MEDICINE.

By W. R. Basham, M.D., Physician to the Westminster Hospital.

Lecture V.

Case of Apoplexy complicated with fracture of the temporal bone: Post-mortem appearances; apoplectic clot; ramollissement; extravasation of blood between the pia mater and arachnoid, &c.: emphysematous condition of the lungs; encysted carbonaceous deposit in right lung; spurious melanosis of some authors.—Observations on the coincidence of fracture of the temporal bone, and its importance in a medico-legal point of view.—Chemical characters of the carbonaceous deposit in the lungs; distinction between black pulmonary matter and true melanosis; reference to previously-reported cases; deposit probably occasioned by an impure and loaded atmosphere, principally in miners and others similarly employed. Case of anomalous cerebral symptoms occasioned by ulceration of the ileum and cæcum: Post-mortem report.—Character of the symptoms during life, with general observations on the peculiarity of the cerebral indications in enteric disease.

The case of S. G., an old man seventy-five years of age, who was brought into the Hospital comatose, and who died a few hours afterwards, is, in respect of the *post-mortem* appearances, of some interest to the student in pathological anatomy. He was admitted into the Hospital on the evening of the 31st of October, and when brought in was quite insensible, breathing stertorously; pulse 40, full, labouring and jerking; limbs flaccid and powerless; extremities cold; temperature of the surface low; face pallid and cadaveric; pupils dilated and immovable. He was seen by a policeman to stagger and fall heavily on Westminster Bridge. He was raised up quite insensible by the policeman, and brought to the Hospital on a stretcher. Some blood was taken from his arm, and by midnight his pulse had risen to 72, but he did not rally, and died at three a.m, eight hours after the first seizure. It was subsequently ascertained from his wife, that for the last few weeks he had suffered from vertigo, frequent sensations of giddiness, and a constant dread in the street of being run over; such feelings doubtless arising from the confusion of thought incidental to the state of brain then existing. He, however, had never complained of headache, nor any partial loss of sensation in any part; but had, for many autumns and winters been subject to severe paroxysms of cough, such as occur in asthmatics. He was an old soldier, having been for many years in the Sappers and Miners, and had enjoyed excellent health, his winter cough never preventing his attention to his ordinary avocations.

Post mortem examination thirty hours after death.—Body well formed, limbs proportioned, and muscular system highly developed. An extensive ecchymosis appeared on the scalp, about the posterior portion of the left temporal muscle; there was no external injury of the skin. On reflecting the scalp, the extravasation of blood between the calvarium and scalp was rendered more evident, a layer of coagulated blood being observed between the scalp and bone. No sanguinolent effusion existed between the skull-cap and dura mater, but beneath the latter membrane and the brain, especially on the left side, and extending over the superior surface of the left hemisphere, an extensive coagulated exudation existed. The arachnoid was of the ordinary aspect; beneath it, as well as in the ventricles, some small amount of serous cadaveric exosmosis was apparent. The pia mater was throughout injected, but not highly so, but towards the lower portion of the middle lobe of the left hemisphere, and near the fissure of Sylvius, some blood had extravasated between the pia mater and arachnoid; and at the most inferior portion of the middle lobe, at the point corresponding with the part that lies in the left temporal fossa, the cerebral surface was stained of a chocolate brown, was soft and pulpy to the touch, and when incised developed a small clot of blood, surrounded by softened and yellowish cerebral matter, to the extent of about the eighth of an inch. The vessels of the cerebrum that led from or into this clot, and within a few lines of it, contained coagulated fibrin, distinctly moulded in the vessels, and from which it could be drawn thread-like. No other evidence of diseased action could be traced in the cerebrum or cerebellum, excepting a general hyperæmia of all the tissues. The white matter of the cerebrum appeared of its ordinary firmness, and did not indicate any condition approaching *ramollissement* except in the spot indicated in the middle lobe. The temporal bone of the left side was fractured, the line of injury passing in the direction of the petrous portion of the bone, and running between the groove of the middle meningeal artery and the superior ridge of the petrous process of the bone, it passed through the squamous portion and upwards a short distance into the parietal bone, of the same side. Externally, the fracture had not descended so far as the auditory meatus, nor internally could it be traced to the anterior extremity of the petrous portion of the bone. Some blood was extravasated between the fractured edges. On raising the sternum

the lungs collapsed. They were spongy and elastic throughout; but on the external surface of the superior lobe of the right lung, as also on the middle lobe, were three remarkable emphysematous vesications, the largest equalling in size a hen's egg, the two smaller being about that of a pigeon's. They collapsed instantly on being punctured, and exhibited internally a loose and very expanded cellular structure. The bronchial mucous membrane was pale and of a healthy aspect, but the longitudinal fibres in the secondary divisions were developed in a high degree. It has been said that the lungs were spongy throughout, but two points were exceptions to this, for at the apex of the right lung, and posteriorly on the surface, or within the eighth of an inch of the surface, of the middle lobe, two spots declared themselves to the touch, dense, firm, and carnified, and also distinctly circumscribed. Neither of them exceeded in dimension a moderate-sized filbert. When cut into, these masses appeared encysted, and were bounded by firm cellular tissue; the contents resembled both in colour and consistence, a black carbonaceous pigment. Upon examining a portion under the microscope, the appearance was that of black amorphous grains, like carbon in a state of minute subdivision; bands of cellular tissue seemed to pass through this carbonaceous deposit. The bronchial glands were of ordinary appearance. The remaining viscera presented nothing worthy of note, except that the kidneys were much lobulated, and both were encysted, the left contained a serous cyst, the capacity of which was equal to ten ounces.

There are several circumstances and conditions in this *post-mortem* record of considerable interest to the student as well as to the more experienced practitioner. First, the state of the brain as expressive of the apoplectic condition; secondly, the existence of fracture through the temporal bone, presenting a complication of much medico-legal interest; and, thirdly, the state of the lungs as indicative of interlobular emphysema, with the extreme development of the longitudinal fibres in the bronchii, expressive of the asthmatic paroxysms during life, together with the presence of two encysted deposits of carbonaceous matter in a state of minute division, and a question raised thereon,—whether the circumstances under which he may have been placed as a Sapper and Miner could in any way explain the existence of these unusual appearances in the pulmonary tissue,—whether working oftentimes in an atmosphere loaded with particles of carbon suspended in the air, (as would be the case in many mining operations in military works,) could in any way have tended to the development of these deposits.

Let me first direct your attention to the state of the head, the scalp, and brain. In the former we have evidence of external local injury; in the latter proofs of an apoplectic cyst are unquestionable. I am anxious to point out to you the limit of the indications by which these two conditions are proved. The extravasation of blood beneath the scalp under the temporal fascia must have arisen from external injury, and when we find on minute examination that the temporal bone is fractured, the fact is established beyond doubt. On examining the state of the brain and its meninges we observe blood extravasated beneath the dura mater, between it and the arachnoid, not upon the dura mater, between it and the bone. Blood has also effused between the pia mater and arachnoid, and at the most inferior point of the middle lobe of the left hemisphere, at the concavity of this lobe lying in the temporal fossa, and close adjoining to the line of fracture; the cerebral substance is observed discoloured, of a purplish brown, and the spot being opened, displays a clot of blood, surrounded by medullary matter—soft, pulpy, and of a brown-ochrey hue, presenting the condition usually recognised as *ramollissement*. These appearances are evidences of the apoplectic seizure. The presence of an apoplectic clot or cyst, without accompanying effusion of blood between the meninges or into the ventricles, is not incompatible with life. The cicatrices of many such cysts have been frequently observed in the brains of apoplectics. In a case examined by me two years since no less than five such cicatrices or remains of apoplectic cysts were observed, two in the left hemisphere, one in the thalamus, one in the corpus striatum of the opposite side, and one in the cerebellum. These were severally in various stages of obliteration, and corresponded in number and appearance to five distinct apoplectic fits that this individual had suffered from during the preceding three years. An apoplectic cyst, or sanguinolent clot, even though surrounded by a limited amount of softening, does not necessarily involve the cessation of the vital processes; but in the case before us the apoplectic condition of the cerebral substance was accompanied by effusion of blood between the pia mater and arachnoid, and between the arachnoid and dura mater. It is this transudation of blood beyond the cerebral mass and upon the surface, or into the cavities, of the brain that constitutes for the most part the fatal lesion in apoplexy; for experience proves that so long as the effusion remains encysted and confined to the cerebral mass, although paralysis usually supervenes, yet the organic functions still continue, those of sensation and motion being impaired. But when the blood escapes beyond the cerebral substance, and is transuded between the meninges, or into the ventricles, the functions of organic life appear to be incompatible with such lesions, and death speedily ensues. It follows from this that transudation of blood between the pia mater and arachnoid, or between the latter and the dura mater, must be accepted as a more fatal lesion than the existence of a clot in the medullary mass; in other words, a simple sanguinolent cyst in the cerebral substance is of less vital moment than one occurring in the superficies of the convolutions, and accompanied by escape of blood between the vascular and serous investments of the hemispheres.

I directed your attention to the soft ochrey-brown pulpy state of the medullary substance that surrounded the clot. This softened condition of the cortical portion must not be viewed as the result or effect of the sanguineous clot, but rather as a condition preceding, and predisposing, if not accessary, to the formation of the apoplectic cyst. There could be little doubt but that the brain had been undergoing some morbid

changes at this spot for some time previous. The mental symptoms spoken of by his wife indicate this. The frequent giddiness and uncertainty of gait, hesitation of manner, and a dread when walking of being run over, spoke of some changes going on in the encephalon inimical to its continued integrity. The opinion of the best pathologists is, moreover, in favour of this view,—that the *ramollissement* surrounding an apoplectic cyst must be admitted as a condition preceding, not following, the formation of the clot.

The coincidence of fracture of the temporal bone imparts to this case an additional interest; and had the circumstances under which he received this injury been less public, or had any mystery existed, as to the manner in which the accident happened, some questions of great medico-legal moment would have arisen, and would have embraced these considerations,—whether the apoplectic effusion, or the extravasation from the fracture, was the cause of death; and the question would comprehend the equally important one,—whether a blow, or any external violence sufficient to fracture a bone, could possibly induce such an apoplectic cyst as existed in this case, or whether it was not more probable, that the apoplectic fit first supervening, gave rise to insensibility and sudden loss of muscular power, under which the body might fall heavily, and thus account for the external injuries. In the case before us, the facts and circumstances under which the patient was found are sufficiently public and satisfactory, and preclude any speculation as to the probable origin or relation of any of the pathological appearances; but if this man had been found insensible and alone, and robbed, or any doubt had hung over the origin of the accident, then such questions as I have propounded would necessarily suggest themselves, and would imperatively demand a clear and explicit solution to satisfy the demands of public justice. In a medico-legal enquiry, the first point to be determined would be the nature and extent of the external injuries. Contusion of the scalp, with extravasation of blood beneath the temporal fascia and fracture of the temporal bone are present, all of which might equally result from a blow or a fall. These local injuries are unquestionably of themselves sufficient to cause death; but on examining the state of the brain, an apoplectic cyst is found, with transudation of blood between the pia mater and arachnoid, a lesion also incompatible with life. An important point thence arises, to which of these two competent causes are we to attribute the death of the person. I quote the following passage from a note in *Beck's Medical Jurisprudence*, p. 330. Article wounds:—

"If effusion of blood be found between the dura mater and the skull, and if a bruise on the scalp corresponds to the part, we may conclude that it has been caused by the blow; but if blood has been found between the dura mater and the brain, though we should discover the marks of blows, or even fracture of the skull, still the question may be, 'might not the patient have been attacked with apoplexy during a struggle?'" A case is then quoted from Dr. Cheyne in illustration.

The unequivocal proofs of apoplexy, therefore, in this case would be accepted as satisfactory evidence,—that death was more likely to have been promoted by this cause than by the local injury; and this inference would be further established by detailing the condition of the brain surrounding the apoplectic spot. For it has been already shown that this softened discoloured condition of the cortical substance must have existed antecedently and could not in any way have been caused by the apoplectic effusion, still less by the local injury. The entire medico-legal question thus turns on the nature and extent of the cerebral complication in conjunction with the local injury. If the cerebral lesions are sufficient to cause death, and capable of being produced independently of external injuries, then we are bound to suppose that death ensued from causes originating in the brain, constitutionally produced, If, on the contrary, the cerebral conditions are such, that it is more likely they were caused by the external injury, such as simple effusion of blood, unaccompanied by any express circumstances proving a spontaneous origin in the system itself, we must then declare the external wound to have been the immediate cause of death, and death by violence, not from natural causes, would then be recorded.

The state of the lungs in this case were an excellent illustration of the conditions of interlobular emphysema, and the hypertrophied condition of the longitudinal fibres of the bronchi, even down to the smaller subdivisions, spoke of the existence of asthma during life, which was verified by the wife's account of the paroxysms of cough, to which he was subject. But there was one other condition of these lungs, or rather of the right lung, of peculiar pathological interest. In examining the lung of this side to determine its spongy crepitating condition throughout, the sense of touch was arrested at two spots, which felt hard and circumscribed. Their situation has been already noted: they appeared encysted, being surrounded by cellular tissue of a dense structure, and when cut into developed a black carbonaceous pigment, which, when examined under the microscope appeared to consist of amorphous granules of carbon, in a state of minute division. This deposit was not affected either by hydro-chloric acid, nitric acid, nor by liquor potassæ; but I much regret now that I did not submit it to more minute chemical analysis, with a view of determining its positive chemical properties. It was miscible with water, stained the fingers black temporarily, and the negative action of the acids and alkalies on it testify to its being similar to carbon, and if carbon, then in all probability, a deposit of carbonaceous matters inhaled by the respiratory function; for it had not the appearance of a matter deposited by secretion, nor any similarity to melanotic disease. Laennec has distinguished black pulmonary matter from true melanosis, one of the characteristics of the former being its isolated situation in the pulmonary tissue or bronchial glands, and its distinct carbonaceous character when chemically treated, while the latter is seldom or never found confined to one organ, but is distributed through several, and possesses distinct chemical characteristics of organic origin. Laennec also referred

the presence of the black matter found either in the bronchial glands or the pulmonary tissue to the inhalation of carbonaceous particles in minute division, floating in the air, and originating from the ordinary processes of combustion, whether for the production of artificial light or warmth, Laennec even considered the grey mottled appearance of the surface of the lungs of most patients to be dependent on minute quantities of carbonaceous matter, deposited and scattered irregularly through the lungs; and this mottled aspect of the surface he considered to be more prevalent in the inhabitants of towns than in those who dwell in the country, and he cites the appearance of the lungs of infants as corroborative of this view, in whom it is observed that the lungs are of a rosy pink and deficient in any trace of the mottled condition.

A case reported by the late Dr. J. C. Gregory, of a patient who died in the Edinburgh Infirmary, may be cited as one of the earliest recorded and best illustrated cases of this black deposit. In that case, "the lungs were found of one uniform black carbonaceous colour, pervading every part of their substance. The right lung was much disorganized, and exhibited in its upper and middle lobes several large irregular cavities, communicating with one another; a considerable portion of the pulmonary substance surrounding them was dense, hepatized, and friable. The bronchial glands were not enlarged, but partook of the same black colour as the substance of the lungs." The black matter was analyzed by Dr. Christison, and after determining the action of hydrochloric and nitric acid, and liquor potassæ upon it, and observing the negative results produced by each of them, a portion of that unacted upon by nitric acid was well washed, dried, and introduced into a small tube retort, with the beak subsequently drawn out fine; the bulb was heated to a dull heat, and all the products of the distillation from coal were obtained,—an inflammable gas, a volatile fluid like naphtha holding in solution a crystallizable matter identical in character with napthaline. This analysis proved the carbonaceous deposit in this case to be coal dust in a state of minute division. The patient had been accustomed to work in the confined limits of a coal mine, and was constantly respiring an atmosphere impure and loaded with carbonaceous particles.

It is, however, to Dr. W. Thomson's report in the *Medico Chirurgical Transactions* for 1837 and 1838, vols. 20 and 21, "On black expectoration and black matter in the Lungs," that the profession is indebted for a more comprehensive account of the presence of carbonaceous deposits in the lungs of those engaged in the coal-mining districts. His paper furnishes unquestionable proof that the deposit is of more frequent occurrence among, if not specially confined to, those who work in mines, or in places the atmosphere of which is charged with carboniferous dust or vapours; those who work above ground, or in a purer atmosphere, seldom exhibiting these accumulations except in a trifling degree, and then principally confined to the bronchial glands. Dr. W. Thomson's record of cases also proves, that though many fall victims to the irritation which these extraneous particles create in the pulmonary tissue, and die with many of the symptoms of phthisis, and whose lungs are found disorganised after the manner of those in whom tubercles are deposited, yet there is a class of cases in which the lungs are infiltrated with black matter without any marks or symptoms of pulmonary disease developing themselves during life. Among several cases of this class recorded, is one of a coal-miner, who died at seventy, and who had always enjoyed excellent health. He appears only to have suffered from some slight pectoral symptoms analogous to chronic bronchitis or pulmonary catarrh, and his death was occasioned by some hepatic disease. "Both lungs presented a perfectly black appearance externally, and when cut into, throughout both lungs were felt and seen hard masses of black matter, from the size of an almond downward. In the left lung were several chalky bodies encased in black matter. There was no black matter in the bronchial glands." From the record of these cases it would appear, that those who work in situations and at employments in which the air is loaded with dust or carbonaceous particles, are more subject to these black accumulations than others; and from the chemical nature of these deposits, we can hardly refuse to admit that their contents are extraneous, and the result of inhalation from without.

The occupations and duties in early life of the individual whose case has suggested these remarks, were especially calculated to facilitate these deposits; for although we have no history of his services, yet, as a Sapper and Miner, dying at the age of seventy-five, we may fairly infer that in early life he was actively employed in those military duties peculiar to his branch of the service, which would place him in circumstances oftentimes identical with the coal-miner, where blastings are frequently employed; and he would thus be equally exposed to all the conditions most favourable to the deposit of these carbonaceous accumulations.

The case of the poor girl, whose body has been examined this week, deserves also some remarks; for this case illustrates how extensive ulceration may proceed in the ileum and cæcum, without developing any well-marked symptoms for some period preceding death; and it also exemplifies how, even in the adult, the symptoms may indicate cerebral excitement and inflammation, rather than intestinal ulceration.

E. W., aged 19, a servant, was admitted November 24th. On being brought into the physician's room, she exhibited a dull, almost idiotic, manner, answering no questions, looking vacantly about her, but exhibiting no indications of physical debility or muscular prostration, for she walked to the hospital with her sister, and nearly up to St. Margaret's ward, unassisted, her condition indicating some obscure cerebral derangement. On being examined in the ward, the pupils were observed to be much dilated, the balls protruding, and she shrank quickly and sensitively when they were pressed. The skin was hot; the pulse frequent; the abdomen tympanitic, but soft and yielding, and no epigastric or cæcal tenderness could be detected; the tongue was red, but broad, and clean, and moist. She was ordered Hydrarg. Chloridi, gr.

iv.; Pulv. Ipecac., Comp., gr. vj., statim; with fever draughts every four hours.

The next day the pulse was 140; skin intensely hot; pupils insensible, being much dilated; the respiration much accelerated; stares vacantly about; answers no questions; protrudes the tongue when desired, which is clean and moist; face much flushed; eye-balls sensitive; skin bedewed with a copious perspiration; pulse 136, soft, but incompressible; the urine and fæces have been passed unconsciously, the latter have the ordinary aspect. The head was shaved; cold lotion applied. Antim. Potassio-Tart., gr. ¼; Opii Pulv., gr. ss., quartis horis.

The report on the 28th states that she passed a quiet night, but did not sleep; answers no questions; some little incoherence and muttering to herself; bowels have not acted, and the bladder was relieved by the catheter. Enemata were administered. At night on the 26th she appeared better, and was temporarily sensible, answering one or two questions in monosyllables. The night was passed quietly, and in the morning she was reported as much better; she even sat up in bed, and took a little arrowroot in the morning of the 27th, but soon after she suddenly became pale and death-like. There was no convulsion; but the pulse was small and rapid, and then imperceptible; the surface was bedewed with a copious death-smelling sudoresis. She gradually sank and died an hour after the change that appeared at 10 a.m.

Sectio cadaveris thirty hours after death. The body was well formed; no emaciation; on the contrary, the limbs were rounded and plump from subcutaneous fat. The cavity of the cranium exhibited well-marked indications of acute hyperæmia in all its parts; the vessels of the dura mater were much injected; the arachnoid was diaphonous and natural; the pia mater was highly injected, so much so as to present the appearance of a dusky-purple; the substance of the brain was natural, except the presence of innumerable red spots from the divided vessels, and the cortical part assumed a dark almost madder hue; the ventricles contained no more serum than could result from cadaveric exosmosis. The lungs and heart were healthy; the stomach and intestines distended with flatus; the lining membrane of the stomach was pale and natural in appearance, but easily detached and peeled off; the duodenum and jejunum was also remarkably pale and exsanguineous. The lower eighteen inches, however, of the ileum was studded with many warty ulcerations, this appearance arising probably from the enlargement of the follicular glands in the first instance and their subsequent ulceration; one ulcered surface wae more than an inch in extent, was oval-shaped, its margins considerably elevated above the surrounding membrane, and its cavity containing a dirty spongy matter, like gangrenous cellular tissue; the surrounding portions of mucous membrane were injected. The entire space of the cæcum was involved in one large, jagged, irregular, wart-like ulcer, its surface being wrinkled and covered with the same conditioned substance attached to the ulcers of the ileum. A nail's breadth beyond, the cæcum and the mucous membrane of the colon presented the same pale state of the mucous membrane that marked the stomach and duodenum. The fimbriated extremities of the Fallopian tubes were both intensely congested; the ovaries contained minute serous cysts; the liver, kidneys, spleen, and pancreas, had a healthy appearance.

It is remarkable that inflammation and ulceration of the intestines are oftentimes accompanied by indeterminate and most obscure symptoms. From our knowledge of the functions of the intestines, and of the important part they perform in the animal economy, we might almost infer that the slightest deviation from healthy action would be expressed by some unequivocal symptom, which would emphatically declare the seat of the derangement; but such is not so. Of all the organs of the body under the influence of disease, the intestines exhibit the least expressive and most variable symptoms. This arises from the wide-spread influence exercised by the intestinal function over other and distinct organs, and the powerful sympathy excited in them by intestinal derangement; hence it is that certain portions of the intestinal tube, whether in a state of simple congestion, or even passing into ulcerative disorganization, may almost be said to possess no true pathognomonic characters, oftentimes giving rise to symptoms simulative of other diseases, and thereby masking the real though latent disorder.

The case before us is a well-marked example of the disguise under which intestinal mischief may present itself, and proceed to a fatal termination without developing any prominent abdominal indications. Except some trifling tympanitis of the abdomen all the symptoms declared for cerebral rather than abdominal disease.

It is commonly asserted in books that inflammation of the intestines in adults is easily determined and recognised in every part of their extent; but that in infants, and in the earlier periods of life, it is admitted that much obscurity often hangs over the symptoms. In children acute enteritis is frequently expressed by cerebral symptoms, but in adults, on the contrary, the greatest variety of sympathetic irritations develope themselves, and as a general rule it may be stated that the enteritis of children is more frequently expressed by cerebral irritation than in the adult; yet enteric disease in the latter not unfrequently declares itself by symptoms chiefly cerebral. It is usually asserted, and practically it is true, that inflammation and disease of certain distinct portions of the intestinal canal are sufficiently well-marked by specific pathognomonic sympoms. Thus, in inflammation of the duodenum, or as the stomach is usually involved in gastro-duodenitis, this condition is declared by the presence of more or less jaundice, pain and fullness over the region of the duodenum, irritable stomach, loaded urine, and clay-coloured dejections. If the stomach be alone the seat of inflammation, vomiting (obstinate and constant,) of a green bilious fluid, is the most prominent symptom. If diarrhœa, long-continued and exhausting, present itself, experience justifies us in fixing on the colon as the seat of the disease. Thus, when these isolated portions of the alimentary canal are involved in inflammatory or dis-

eased actions, the signs by which they are recognised, and the symptoms by which they are accompanied, are sufficiently distinct and unequivocal. *Post-mortem* examination testifies to the truth of this point in semeiology, for after frequent and obstinate vomiting the stomach is found inflamed and injected, and after long continued diarrhœa the mucous membrane of the colon is found in a similar condition. Now, conversely, this is true also, viz., if no vomiting or diarrhœa be present during life, we may safely infer the absence of any inflammatory condition of the stomach or large intestine. In the case before us there was neither vomiting nor diarrhœa, and the dissection proved the stomach and colon to be natural in appearance, and entirely free from any trace of disease.

The symptoms usually present in adults when the middle portions of the intestinal tube, the jejunum and ileum, are the seat of disease, are those of continued fever—hot skin; quick pulse; urgent thirst; tongue red, parched and dry; tympanitic abdomen, with iliac tenderness; great physical prostration and mental stupor. It is very rare that inflammation of the ileum in the adult proceeding on to ulceration, is unaccompanied by some of these symptoms more or less prominently expressed, and when a case occurs in which all are absent, and in the place of them a clean moist tongue, skin not elevated in temperature, no physical prostration, no abdominal tenderness, some slight resonance of the abdomen, a sharp quick pulse, with a remarkable amount of stupor and sudden death, with *post-mortem* proofs of extensive ulceration in the ileum and cæcum, and no cerebral lesion beyond congestion, the record of such a case becomes interesting from its deviation from ordinary examples, and is of much value and moment if it presents any analogy to cases of similar irregularity recorded by others. Dr. Stokes records a case of enteritis, in which extensive ulceration existed in the lower portion of the ileum; neither vomiting nor diarrhœa were present during life, and the stomach and colon were found perfectly free from vascularity. "In this case," he says, "the absence of vomiting and of diarrhœa in the more advanced periods is extremely interesting as connected with the healthy state of the stomach and colon." In the case under consideration, there was neither vomiting nor diarrhœa during life; the stomach and colon were free from all vestiges of disease, yet the ileum and cæcum exhibited many ulcerations in the lower portion of the ileum, and the cæcum was in a state of complete disorganization. Again, Andral relates a case of a patient, aged thirty-five, "who was attacked with pain of the head, followed by great loquacity and exaltation of ideas, and other symptoms of cerebral excitement. The tongue was natural and the abdomen soft *and not painful*. He had soon after furious delirium and indications of strong determination to the head. Copious general bleeding, and the application of leeches to the neck produced no alleviation, and the patient expired suddenly in the midst of a general spasm. The only local symptom of an affection of the bowels during the disease was a slight diarrhœa. On dissection, the brain and its membranes were found perfectly healthy, but the lower third of the ileum was in the state of acute inflammation."*

As it is not doubted that much obscurity frequently attends inflammatory and ulcerative disease of the small intestines, it is of great moment to determine what signs are of most value by which we can distinguish the latent disease among the many sympathetic and anomalous conditions that involve it in obscurity. Is there any one specific indication on which we can uniformly depend? I believe not; nor do I believe that any series of symptoms is sufficiently constant to be relied on, as distinctly expressive of enteric ulceration. We have already seen, that although a hot skin, dry tongue, thirst, abdominal tenderness, and tympany, with indications of stupor, when present, may be accepted as proofs of enteric disease, yet the present case, as well as others elsewhere recorded, unquestionably declares, that ulceration may exist without any such catenation of symptoms. Now although ulceration of the ileum and cœcum may exist without a hot skin, with a moist, clean-looking tongue, without any morbid thirst, and with dejections, even natural and bilious in appearance, and no abdominal tenderness or tension, yet there are accompanying symptoms, chiefly cerebral, which, though oftentimes obscure, will, if closely watched, tempt us at any rate to doubt the presence of inflammatory action in the brain; and if so, to cause us to direct our attention to some other organ for an interpretation of this sympathetic irritation of the brain. I am anxious to ascertain if there be any peculiarity about the cerebral symptoms, by which we can distinguish them from those which arise in true inflammation of the brain and its meninges;—whether any distinction can be made between the symptoms developed in encephalitis or arachnitis, and those witnessed in cerebral irritation from enteric disease. In attempting this distinction, we must confine ourselves strictly to the mental symptoms; for the state of the pulse, skin, tongue, and excretions could only testify to the amount of concomitant fever. In cerebral inflammation, there is usually observed wild raving delirium; a great amount of physical violence; incoherence of ideas; extraordinary hallucinations; sleeplessness and general restlessness: these are succeeded by a condition more or less indicative of coma. The cerebral symptoms developed as sympathetic with intestinal disease, are characterised usually by a peculiar stupor; there is no raving delirium; the patient lies passive, dull and motionless; can be roused to temporary consciousness; will protrude the tongue when energetically required to do so; the nights are sleepless, but the patient remains quiet and apparently undisturbed; the pupils are oftentimes dilated and the eye-balls glazed. These are the usual characters of the symptoms in sympathetic irritation of the brain from abdominal irritation. Yet it is evident that these symptoms cannot always be relied on,—as in Andral's case, the symptoms were of exaltation of all the mental faculties, with incoherence and delirium. I cannot but advise you, however, to suspect something other than cranial disease, if a case presents itself with

* "Cyclopœdia of Practical Medicine."

the peculiar stupor which I have described, and which has not been preceded by any more acute symptoms of cerebral inflammation; if, in addition to this stupor, there be abdominal tension and tympanitis, you may with great reason suspect the head-symptoms to be sympathetic; if, also, there be tenderness about the right iliac region on pressure, the patient shrinking when pressure is made there, and if there be a hot skin, rapid pulse, red dry tongue, with craving thirst, you need not doubt but that you have a case of enteric disease to treat, and that with such symptoms your prognosis cannot but be otherwise than unfavourable.

ON THE TREATMENT OF OVARIAN DROPSY BY OPERATION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

"Nunquam aliud natura, alind sapintia dicit."

I feel indebted to your correspondent, INQUIRER, for an opportunity of supplying an important omission in the review I took of my case of ovarian dropsy published in your Journal, the 16th of last December. If I rightly appreciate the tenor of his enquiries, he wishes to know *the data* on which I have arrived at my conclusions respecting the comparative absence of danger, and the superior advantages attending operations conducted on the principle I advocate. To form a complete collection of the cases which bear directly or indirectly on the exemplification of this principle, scattered as they are over such a wide field of research, would be a task incompatible with the discharge of my professional duties. The subjoined abstract, though incomplete, will however, I trust, not merely satisfy him that I had sufficient grounds on which to base my deductions, but also attract and fix the attention of my professional brethren to the subject, and induce them to give the operation in question a fair trial.

EIGHTEEN CASES OF OVARIAN DROPSY, TREATED ON THE PRINCIPLE OF MR. BAINBRIGGE'S OPERATION.

London Medical Gazette, Vol. 18, p. 469.—An operation for relief of ovarian dropsy is recorded. An incision of about an inch and a half was made below the umbilicus; the sac was opened to about the extent of three inches, and evacuated, and a ligature passed through it, and secured externally, in order to keep the sac in contact with the abdominal parietes. There was a discharge for about a month, when it ceased, and the opening closed. *The result was a permanent cure.* By *Mr. Currie*, Liverpool.

Memoires de L' Académie Royale de Chirurg., tom II., p. 431 to 444, An. 1753.—A detailed report of two cases by Le Dran, in which an incision was made into the cyst, the contents evacuated, the wound kept open, and the suppurative process established in the cyst. *The result was a permanent cure*, a fistulous opening remaining in one of the cases for two years, and in the other for the remainder of the time up to which he had observed the case.

It appears that subsequently to these two successful cases Le Dran was in the habit of operating in this way. He says, he always found the fistula remained permanent, except in the solitary case above given, where it closed in two years. To keep open the communication with the interior of the cyst, he sometimes employed a tent, at others left the canula or even leaden tubes in the wound, and occasionally used injections. He remarks on the inefficacy of tapping, and then says "J'ai osé tenter une nouvelle route et le succès a répondu a mon espérance," from which it is natural to infer that he was eminently successful.

Lancet, Vol. 13, p. 879.—Allusion is made to the above cases; and *a similar one* by Portal is mentioned, in which *a cure followed.*

Lancet, Vol. 20, p. 603.—A case by M. Rigollot, of St. Etienne, is given, in which after the use of the trocar irritating injections were employed. *The cure was completed in a month.*

London Medical Gazette, Vol. 26, p. 349.—A case of ovarian dropsy, treated by tapping the tumour in the vagina. Although intended merely to liberate the fluid by tapping, the *wound kept open*, and a continuous discharge took place. *Permanent cure.*

Edinburgh Medical and Surgical Journal, vol. 16, p. 367—A case of operation by incision,—closure of the opening by the surgeon,—spontaneous re-opening of it subsequently, of about the size of a small pea from which, on the slightest exertion, matter flowed freely, which the operator considered *an unusual effort of nature* for her relief; it was followed by *permanent subsidence of the tumour and restoration of health.* By Dr. Mc'Keever, Lying-in Hospital, Dublin.

In my case, as in the above, I regard the continuance of the discharge as an *effort of nature* to suppress any further development of the disease.

Medical Times, vol. 8, p. 233.—A case is quoted as having been given by Dr. Ollenroth, in which the wound was kept open, and the contents of the sac allowed to escape through it for a considerable period; *followed by a permanent and radical cure.*

London Medical and Surgical Journal, vol. 4, p. 428. —*A case of permanent cure* is recorded, by an incision into the sac, partial evacuation of its contents, and a tent left in the wound. Through the opening a fluid and portions of the cyst from time to time were discharged. The opening remained fistulous.

London Medical and Surgical Journal, vol. 6, p. 320, —A case, by Mr. Langley, of ovarian dropsy, complicated with pregnancy. He punctured the cyst in the vagina, the contents came away, and the woman was soon after delivered. The editor remarks upon it:—"The result of the case warrants paracentesis per vaginam; the advantage would be *the gradual and constant discharge* of the fluid by an opening so dependent." Of course he must allude to the fluid draining off as soon as formed again in the cyst, and

have supposed such to have been the case in the present instance.

Philosophical Transactions, Vol. 33.—Dr. Houston's Case of Operation for Ovarian Tumour. He found, on introducing the trocar, that no fluid came away; but on making an incision, he succeeded in drawing off the contents of the sac, which were partly gelatinous, partly pultaceous, and very considerable in quantity. He then brought the sides of the wound together, and secured them by suture, leaving an aperture, however, through which a discharge from the cyst continued to pass for some time. The opening finally closed, and the woman was *completely cured*, living fourteen years after, without any return of the tumour.

Archives Générales de Médecine, Vol. 58, p. 362.—A case of ovarian abscess is given by M. Löwenhardt, of Prenzlau, in which he evacuated the contents of the ovary through an incision in the abdominal parietes. For about two months the matter continued to drain away, *gradually decreasing in quantity*. At the end of this time the tumour had quite disappeared, the discharge ceased, and the opening closed. He says—"*La guerison etait complete.*"

Archives Générales de Médecine, Vol. 47, p. 354.—A case is recorded, (extracted from the *American Journal*, February, 1838,) in which Mr. Mussey, in attempting to extirpate a very large ovarian tumour was prevented doing so by numerous and extensive adhesions. He was obliged to have recourse merely to making a small incision into the tumour, through which its contents were drawn off. He kept up the opening by means of a tent. A clear liquid came away for several days; it then became *purulent, gradually diminishing in quantity for three weeks; when it closed, the tumour had disappeared.* A year after the woman was quite free from any return, and was delivered of her fourteenth child.

Archives Générales de Médecine, Vol. 50, p. 487.—A case is quoted of an operation by Mr. Arnott, of the Middlesex Hospital, in which he punctured the vagina, and a discharge from the cyst continued for *sixty-four days*, when a *complete cure was effected*, and the opening in the vagina perfectly closed.

The Editor in his remarks alludes to another case, *similar in its nature and results* to the one above mentioned, as having been published in the *Revue Médicale* by M. Recamier.

Archives Générales de Médecine, Vol. 31, p. 427.—This is an account of an operation for extirpation of ovarian tumour, attempted by Dr. Ehrhartstein, in which from an aperture in the external wound serum continued to drain for some time, which afterwards changed into a milky fluid, and did not disappear till the ninth week after the operation, when the wound cicatrised, *and the patient was cured.*

Archives Générales de Medecine, Vol. 20, p. 92.—A case is given by Dr. Dieffenbach, of Berlin, where the adhesions were such that he merely punctured the tumour after incision; a sanious matter continued to discharge itself through the wound for some time after, *and the patient ultimately recovered.*

Provincial Medical and Surgical Journal, Vol. 3, p. 593.—Mr. Bainbrigge's operation for ovarian dropsy. In this case an incision was made through the abdominal parietes into the sac; the contents (twenty-five pints of sero-sanguineous fluid,) were evacuated; a plug of lint was inserted to prevent union of the edges of the wound, by means of which a suppurative discharge was set up from the interior of the cyst, which was followed by its obliteration without a single bad symptom, and by a *permanent cure.*

NINETEEN CASES OF OVARIAN DISEASE, TREATED BY NATURE, ON THE PRINCIPLE WHICH MR. BAINBRIGGE HAS ADOPTED.

London Medical Gazette, Vol. 16, p. 643.—Dr. Ramsbotham relates a case of ovarian dropsy, discharged through an opening made by nature at the umbilicus; *the tumour disappeard.* The patient lived eight years after, and had *no return* of it. He also mentions a *similar case* of Dr. Mead's.

London Medical Gazette, Vol. 24, p. 966.—Dr. Henry Davies gives a case of ovarian tumour in which the integuments burst at the umbilicus, and discharged a thick red fluid, which gave great relief. The discharge continued for *seven years, during which the general health was good*; it then closed. Two years after she died of apoplexy.

London Medical Gazette, Vol. 25, p. 396.—A case of ovarian dropsy, bursting at the umbilicus, is related by Mr. Douglas, of Glasgow. The woman died two months after of peritonitis. From the particulars of this case, there does not appear any reason for connecting the operation and the subsequent discharge with the peritonitis.

Lancet, Vol. 2, 1839-40, p. 12.—Dr. Ingleby relates a case of ulceration through the abdominal parietes, through which an ovarian cyst emptied itself. There was a discharge for some time through the opening, followed by a *permanent cure.*

London Medical Gazette, Vol. 35, p. 303.—A case is given of diminution of the cyst, by a spontaneous opening into the abdomen at the navel, which discharged purulent lymph, and relieved the patient in a *permanent manner.* By Dr. Lambrecht.

Medical Times, Vol. 13, p. 262,—A case of *permanent cure* of ovarian dropsy is related as having taken place, after a spontaneous opening at the umbilicus, followed by a discharge of the contents of the sac, and formation of a fistulous passage, which subsequently closed.

Dublin Quarterly Journal, Vol. 1, p. 519.—It is stated that Dr. Montgomery has seen three cases in which ovarian cysts discharged their contents through the parietes of the abdomen. He does not state what the final results were; but had they been unfavourable or fatal, they would no doubt have been mentioned. A similar case is also alluded to, as being at the time (January 6th, 1843,) in Dr. Stevens's Hospital.

Edinburgh Medical and Surgical Journal, Vol. 2, p. 180.—A case by Mr. Anderson is given, in which a spontaneous opening took place at the umbilicus.

There was a discharge from the cyst which lasted *nine months, during which the tumour had gradually disappeared;* she then died, as it would appear, from general cachexy, under which she had laboured long previous to the opening being formed. The state of this patient's health a year before the operation was such, as under any circumstances, to render it improbable that she would live more than a few months.

London Medical Gazette, Vol. 8, p. 291.—A case is given of discharge of the contents of an ovarian sac through a spontaneous opening in the vagina, which ulcerated, and no doubt allowed any new formed secretion gradually to escape. The consequence was *almost complete disappearance of the tumour.* By Dr. Elliotson.

London Medical Gazette, Vol. 31, p. 572.—Dr. Waters gives a case of periodical return of an ovarian tumour and its entire disappearance two or three times after a copious discharge of a thick, yellowish, ropy fluid, viâ *recti et vaginæ.* After the last discharge no return of the tumour had taken place, and the patient's health was in a satisfactory state.

Lancet, Vol. 2, 1839-40, p. 12.—Dr. Ingleby gives a *case of cure* of ovarian dropsy, consequent on ulceration into the bladder, and permanent discharge per urethram, for upwards of a year, of albuminous fluid, shreds of coagulable lymph, and hydatids.

Lancet, Vol. 2, 1839-40.—Dr. Ingleby gives a case of rupture of ovarian cyst into the intestinal canal, as evinced by the vomiting of the contents mixed with fæcal matter, which he describes as lasting for some days, *and followed by a cure.*

Lancet, Vol. 2, 1842 43, p. 422.—A case of spontaneous *permanent cure* of ovarian dropsy, by a discharge from the cyst per vaginam, of several days' duration.

Medico-Chirurgical Review, Vol. 24, p. 206.—Gives *three cases of cure* by accidental rupture of a cyst into the vagina, and discharge through that opening; there can be no doubt that the discharge was continuous for a longer or shorter period.

Many more cases of the above description might be adduced if necessary, for the further elucidation of this very interesting mode in which nature operates successfully for the cure of this formidable disease.

With respect to the ACCIDENTAL CASES to which I have alluded, it appears to me that many *cures* have resulted from the bursting of the cyst into some portion of the intestines, or the bladder, as well as into the peritoneal cavity, under which circumstances a discharge of the fluid takes place, continuing for a longer or shorter period, and thus terminating as in the cases above detailed, in a more or less *permanent cure.* Instances of this kind are by no means rare. As to those cases where an accidental external opening has been made into the cyst through the parietes of the abdomen, as in the well-known case of the goring by a bull, &c. &c., a *permanent cure* has also been effected on similar principles.

The foregoing abstract professes to do no more than give a sufficient number of cases to exemplify the principle of the operation in question, and justify the conclusion I have arrived at. It is worth mentioning that the farther I extended my search the more I became convinced that this operation has been regarded either with *needless alarm* or *culpable indifference.* In presenting these as cases in point, it is to be observed, that with the exception of the first three on the list, it does not appear that the surgeons contemplated or understood the *rationale* of the operation. In their descriptions they seem to overlook the main fact, or mention it in a way to show they attach little or no value to it. Hence some of the cases must have laboured under serious disadvantages arising from careless or injudicious after-treatment, or from the non-employment of subsidiary means, calculated to promote a successful issue of the operation. The cases are, however, not the less on that account to be received in evidence, but rather the more, and I have no doubt that many of the cases on record in which the cure has been ascribed to different causes, or not attempted to be accounted for unless on some vague general principle, would, if more circumstantially detailed, exhibit the particular characteristic feature of the examples I have collected.

My list more than bears me out in the *ratio* I originally laid down, and even the two deaths may be accounted for, as indeed they were, by circumstances totally independent of the open state of the ovarian cyst or the discharge. It may be said that more extensive research would furnish many cases in which death has occurred, either during a discharge so superinduced and maintained, or after its cessation. I much doubt whether *many* such could be adduced—I have not been able to find them. Still I admit a few might be met with, but they cannot be considered as applicable unless it can be shown that the fatal issue might be fairly attributed to the discharge so established and circumstanced; and even could this be demonstrated, I feel confident it would not disturb my *ratio*, as a counterbalancing proportion of successful cases would also be discoverable.

Among the numerous writers on ovarian disease, such as Morgagni, Cruveilhier, Delpech, Lizars, &c. &c., few seem to have regarded this operation favourably. They either magnify its dangers or underrate its value. The cases they adduce in evidence against it do not apply. Instead of judiciously aiding nature in her friendly efforts, they interfere with, and obstruct her by means of stimulating injections or irritating substances, such as *canulas, leaden tubes, bougies, &c.*, left in the wound—a wound which, of all others, requires to be managed with the utmost delicacy and caution. What can be more contrary to the true principles of surgery, and what other than disastrous or negative results could be expected to follow such

practice? Cases treated in this way I exclude from the category. The *errors of art* must not be placed to the account of the *operations of nature*. Dr. Bright is one of those few authors who seems to have formed correct views on the subject, though not perhaps to have thoroughly appreciated its importance. He expresses himself to the effect that in some cases the wound does not close, and that suppuration continues for months or years, and that such an occurrence so far from being fatal, *prolongs existence*. This judicious observer no doubt speaks from experience.

I have again to thank your correspondent, INQUIRER, for the present opportunity, which I gladly embrace, to make a few additional remarks on my own case, suggested by a re-consideration of its details. On making the incision, I should not in any future case consider it advisable to remove a large portion of the cyst, *with a view to diminish the extent of the secreting surface*. I should leave its gradual contraction to nature. In all the cases above given, where nature operated, the sac remained entire, and no bad symptoms followed. There is besides an objection to it where the sac is *free from adhesions*. By removing a considerable portion of a large cyst, I should have a wound of many inches in extent to bring into adaptation with one of inferior dimensions. A *puckering* of the edges of the cyst would inevitably follow. These *puckerings* could not be applied to the lips of the external wound; union therefore might be incomplete, thereby endangering protrusion of the abdominal viscera, and an escape of matter into the peritoneal cavity,—two very serious accidents which must be most carefully guarded against. I should simply remove as much of the sac as would leave the opening in it as nearly as possible corresponding with that of the external wound, and unite the lips of both, accurately and smoothly, by the uninterrupted suture. I am now alluding to sacs free from adhesions at the point of operation.

But when the sac is adherent at this point, all this labour and difficulty are saved. Here it is worthy of note, that the very circumstance which most seriously complicates the *major* and *minor* operations—so called—viz., the existence of adhesions which must be torn or cut through, is not a source of danger, but rather a *great advantage* for the successful accomplishment of the present plan; and indeed could it be possibly ascertained by auscultation or otherwise, that adhesion to the walls of the abdomen existed at any particular point, I should select *that point* for my incision, provided it presented no extraordinary anatomical obstacle.

After the operation all that is required is to introduce a tent of lint into the wound to prevent its closure, foment the whole of the abdomen with warm water, and keep the patient very quiet for a few days, allowing no escape of the fluid except at the time of dressing. The plug should be kept in firmly by means of a compress and bandage, and removed once or oftener in the twenty-four hours, according to the amount of secretion.

In my case, *after the suppurative process* had been established, the quantity of matter being for some time considerable, I placed the patient on a prone couch to allow of its gravitation towards the external opening and its gradual escape. More or less inflammatory action must be expected to ensue after the operation; this should be allowed to subside, and no risk incurred of its increase by leaving canulas in the wound, as was done in cases operated upon with no result by Mr. C. A. Key. The mere introduction of pieces of leather, softened by steeping in oil, as substitutes for the lint plug, produced so much irritation during the chronic discharge in my case that I was compelled to have recourse to leeches and fomentations.

With respect to the cases in which nature herself performed the operation, I cannot help observing, how wonderful and beautiful are her resources under such extremities! and how *long and vainly* has she laboured to indicate to us a safe and simple mode of treating ovarian dropsy! After hundreds of experiments, and ages of experience, we cannot, I feel assured, act wiser or better, even in the present day, than simply to watch her movements, and *imitate her example*. Observe how cautiously she makes her external opening, and instead of violating the system by such a sweeping act as that of the major or minor operation, she almost imperceptibly sets up a new action in the cyst, adapts the treatment to circumstances, and gradually obliterates the cavity.

I trust, Sir, that I shall not be considered as needlessly obtruding myself on the notice of the profession by bringing this case so prominently forward, and entering so minutely into its details. I have been influenced simply by a wish, and animated by a hope, that others may be induced to try a similar method, and reap a similar reward. I shall be glad to see the subject elucidated by other more gifted individuals. The enquiries of your correspondent seem so reasonable, and the operation itself of such vast importance to the interests of suffering humanity, that without loss of time, and at considerable personal inconvenience, I have endeavoured to reply to the best of my ability, and indicate more clearly than at first, what appears to me, the best and safest course to be persued in the practice of OVARIOTOMY.

I remain, Sir,

Your very obedient servant,

W. H. BAINBRIGGE.

Liverpool, January 1, 1847.

PATHOLOGICAL REMARKS ON A CASE OF HEPATITIS RESULTING IN ABSCESS.

By Edmund Boult, Esq., Fellow of the Royal College of Surgeons of England, H. P. Bengal Medical Service, Assistant Surgeon to the Eye Infirmary, Bath.

(Read at the December Meeting of the Bath Pathological Society.)

J. B. a woman, aged 53, of a very full habit of body, and accustomed to live freely, applied to me on the 18th of October, 1845, suffering from congestive dyspepsia. She was generally speaking healthy, but had suffered in her lifetime from inflammatory disease in the chest. She was freely purged with mercurials and saline aperients; low diet was enjoined, and in a few days she was well again; but on the 4th of November, without any assignable cause, (except perhaps an excess of diet, which was not acknowledged,) she was suddenly seized with rigors, followed by the usual symptoms denoting acute inflammation of the liver. The pain was so very acute and so sensibly increased by the slightest touch or pressure, as to lead to the supposition that the peritoneal coat of the right lobe was principally engaged. From the first onset of the disease the urine was completely loaded with lithate of ammonia, so much so as for the first few hours after it was passed, to have the appearance of a brick-red liquor, without any sediment, but afterwards the deposit was thrown down and the fluid assumed a yellowish tinge.

The disease was met very actively, with the usual treatment, which it is not my purpose to dwell upon. I will just observe, that she was freely bled, locally and from the arm, afterwards blistered, freely purged, her system brought rapidly under the influence of mercury, and a strict antiphlogistic regimen enforced; by these means the pain was mitigated, but the inflammation instead of subsiding altogether as was desired, gradually assumed a sub-acute character, and was not to be overcome.

Under these circumstances, abscess was the result naturally to be expected, and accordingly about the beginning of January, 1846, she was again seized with rigors, followed by pulsation or throbbing in the hypochondrium. By the 10th of the same month, the side was tumefied, and fluctuation was readily perceived. The patient, however, was much exhausted; her pulse was 96. On the 11th it had risen to 120, was hard and jerking, betraying in itself the existence of pus, pent up in the system. On the 12th she was troubled with constant bilious vomiting; her countenance was anxious, and it appeared that if she were not relieved in a few hours, death must be the inevitable result. Still she had naturally a good constitution, and there was reason to think, that if freed from accumulating pus, she might rally. Her pulse this day was not to be counted, as she had been hurried getting up to stool; the evacuation being of normal character. I must not omit to mention, that at this time, since the setting in of suppuration, the urine had regained a healthy appearance, and was free from all deposit.

Under these circumstances, with concurrent valued advice,* selecting the softest and most depending situation, on the outer side of the hypochondrium, I passed a trocar obliquely upwards and inwards into the cavity of the abscess, and evacuated nine ounces (by weight,) of pus, mingled with bile, and then placed a small tent of lint in the wound.

The patient was faint, and suffered much from bilious vomiting, but on the whole was relieved. She slept and took nourishment, and in the evening her pulse was 100, soft and equable.

On the 13th I removed the plug, as no pus had escaped through it, and took away five ounces more of similar looking pus to that evacuated the previous day.

The patient still suffered for some days from bilious vomiting, which was very troublesome to manage. The abscess continued to discharge freely and the fluid evacuated seemed to consist of as much bile as pus, and the urine again threw down large deposits of the lithate of ammonia. Once or twice I thought it contained bile, but this was not tested.

The sinus was very difficult to keep open, the external orifice getting frequently glued up, but as soon as any quantity of pus re-accumulated, she became evidently feverish, and altogether worse. However, she gradually improved, and on the 12th of February, a month after the puncturing, I explored the sinus, and found it three inches and a half deep; but as far as I could detect, the cavity of the abscess was nearly obliterated. On the 16th the discharge had almost ceased, and I allowed the orifice to remain closed, in hopes that the sinus would become sound throughout its extent. On the 22nd, deposits ceased in the urine, though on the 25th, it was again loaded.

The patient was now able to move into an adjoining room, though her pulse kept at 105, and she continually complained of cold, and had nearly lost the use of her limbs from paralysis.

Shortly after this she went into the country, and was not under my eye. There I learned that some degree of pain recurred in the side, and it became again tumified, the sinus re-opened and a similar evacuation, as regards quantity and quality, was discharged as on the former occasion.

She returned home after an absence of fifteen weeks. When I examined her, I found the wound still wept a little serum, her pulse was 100, and she was nearly hemiplegic, but her appetite was good and tongue clean. I gave her very little medicine and she began to improve. In August her pulse came down to 84; her side was free from all tumour or tenderness; the sinus was quite closed; her general health much improved; and she was recovering the use of her limbs. When I saw her a few weeks ago, she was enjoying a very fair state of health. She has again returned to the country and I was informed a few days since, that she continues to regain more of her original good health, and has discarded her crutches; but I must not omit to mention, that occasionally, slight tumidity recurs in the side, and a fluid resembling pure serum

* My friends Drs. Bowie and Fergusson, and Mr. Underhay, were so good as to see this case with me, and agreed as to the necessity of puncturing the abscess.

oozes from the sinus in sufficient quantity to moisten her clothes; in other respects she has nothing to complain of.

Having briefly sketched the history of this case, I proceed to make a few pathological remarks on the disease. When inflammation of the liver of an acute or sub-acute character has existed for any length of time, we know that suppuration is not an infrequent result, and the diagnosis of abscess, generally speaking, is not difficult; except perhaps in that form which is described as occurring most frequently in scrofulous constitutions, where a number of small abscesses, about the size of a filbert each, are scattered throughout the substance of the organ; and it may occur, that in cases where fluctuation is readily perceived the pus may be contained in two or more distinct sacs not communicating with each other. Such a circumstance would occasion serious embarassment if relief were attempted by external puncture.

In the present case suppuration was ushered in with rigors, though they are by no means its invariable concomitants. In those cases where the disease progreses insidiously, or where pus is laid down secondarily in connection with dysenteric disease, rigors are generally absent. This circumstance tends to make the exact diagnosis more difficult. I have frequently, in examining the bodies of European soldiers of Her Majesty's Regiments in Bengal, been surprised to find immense collections of pus in livers, where its presence had not been suspected, though in relation to this subject, the late Mr. Twining, a very high authority, says,—"I believe there are always symptoms, which though obscure, are always sufficient to point out the disease." (Diseases of Bengal, Vol. I., p. 29.)

The patient's pulse was quick, small, and jerking, indicating pus being pent up in the system. Increased tumefaction and a sense of fluctuation were soon perceptible in the hypochondrium, and these symptoms are always to be expected when the disease is situated superficially. It is only in the "deep central abscess" that obscurity is likely to occur.

The mere circumstance of pus being formed in the substance of the liver, even with a tendency to travel outwards, affords no guarantee that adhesive inflammation will occur between the opposed layers of the peritoneum; but in this case there was great reason to suppose, from the great pain and tenderness at the onset, that the peritoneal coat was primarily engaged, and this led me to infer that no danger of extravasation into the cavity of the membrane would occur, if an external opening were made, to give exit to the confined pus. The abscess was clearly situated in the superficial portion of the right lobe, and Nature was endeavouring to affect her own cure by tending to a discharge externally; but it was evident that the patient's constitution could *not* afford to wait the result of Nature's own operations, and it became necessary to assist her, otherwise in a few hours death would have occurred from exhaustion; or it appeared possible that the abscess might burst into the peritoneum,—a result not by any means so infrequent as some have supposed, especially in India, where the patients usually die within a period varying from a few hours to a few days.

Assuming Dr. George Budd's opinion to be correct, that the prognosis of hepatic abscess is more unfavourable, generally speaking, when it is discharged immediately externally through the abdominal walls than by any other channel, it is very important to mark what are those conditions which seem most likely to promise a favourable result; and amongst the most evident is the circumstance of the abscess being situated superficially, because then there is most likely to be a less amount of disorganization, and then there is by far the greater probability of adhesions being formed between the layers of the peritoneum, the want of which is a very certain drawback to the success of any operation, and I am doubtful whether Dr. Graves' or any other method offers any certainty of producing such adhesions.

The quantity of pus evacuated was not great; nine ounces, by weight, seemed to empty the sac. We know that the amount of softening and sero-purulent infiltration with which abscess commences, is proportioned to the intensity of the engorgement and subsequent inflammation; and it is evident that they must equally depend upon the amount of structure engaged. Thus, I presume, only a portion of the organ was inflamed in this instance.

The pus discharged was clearly mingled with a large proportion of bile; and I would ask,—was this bile secreted by the walls of the abscess, or was it infiltrated through them from the surrounding parenchyma? It might be supposed that the gall-bladder was injured; but in another case, where large quantities of bile were discharged externally, and the patient died, the gall-bladder was found intact. Perhaps the more probable supposition is, that a large duct was opened by the process of ulceration, and that it refused to take on a reparative action, and so allowed the bile to escape.

The operation was succeded by vomiting. On this symptom I will remark presently.

Long after the patient had rallied from the primary attack the pulse continued high; and although she ate and drank, and slept well, and the side was free from all tenderness, still there can be no doubt that inflammation of a low sub-acute character was going on. Suppuration is a result which relieves and checks inflammatory action, but by no means vanquishes it; and this low inflammation ultimately produced a secondary formation of pus in the sac of the abscess, at which time the patient was not under my eye; but there is great reason to suppose that the original inflammation had never been entirely subdued, and it existed, I believe, without producing pain. The liver itself is not highly susceptible of pain, and I

apprehend that the very painful symptoms in hepatitis are mainly dependent upon the tension, inflammation, or sympathy of its serous investment.

The character of the urine next demands an observation or two. From the first attack of the disease the urine was marked by large deposits of lithate of ammonia, distinguished by a great amount of colouring matter being developed with it, so much so as to give it the appearance of that very scarce kind, which is described as being permanently *red*, and which throws down no deposit. Its specific gravity was rather low, 1.014, at a temperature of 60°, and it contained no albumen.

Deposits of lithate of ammonia are very common in hepatic disease, and I need no apology for quoting Dr. Prout's views on the subject. He says "the lithate of ammonia is not only supposed to be derived from imperfectly assimilated chyle, but also from the deranged secondary assimilation of the albuminous textures of the body." (Stomach and Renal Diseases, p. 203.) He considers that the liver not only performs a *negative* or *excretory* function, but also a *positive* or assimilating power over the oleaginous tissues. The following are his general inferences on this subject:—

"First, the liver is the organ by which the blood is depurated of unassimilated and superfluous oleaginous matters, as well as of those portions of the blood deprived of its azote, of its saccharine constituents, and consequently of its vitality, during the primary assimilating processes. Secondly, the kidneys are the organs by which the blood is depurated of its unassimilated, superfluous, and effete albuminous principles, as well as of the mineral matters incidental to these principles which are otherwise derived. Thirdly, the neutral and alkalescent character of the bile, and the oxygenated and acidulous character of the urine, shew that the general characters of the actions going on in the liver and kidneys are opposed to each other;—in short, that the general action of the liver is of a negative, the general action of the kidneys of a positive, character; and that one of these important organs, antagonistically related to each other, cannot be deranged without deranging the other." (Op. cit., p. 569.) To this he adds a foot note—"This deduction may be stated more generally, thus:—The liver may be considered as the principal focus or *pole* of all the *negative*; the kidneys as the principal focus or *pole* of all the positive actions going on throughout the organic system."

During the continuance of certain hepatic and other diseases, the process of assimilation is interfered with, and lithates are largely eliminated by the kidneys. Now, in the present case, I have before remarked, that on the setting in of suppuration, all deposit ceased in the urine. How is this phenomena to be explained? I apprehend that during the progress of the disease the liver was in a state of intense engorgement, which completely interfered with the due performance of its normal functions. This engorgement was partially relieved by the pouring out of pus. The organ freed from an overpowering incubus, immediately resumed its proper office, and bile was secreted in an inordinate quantity, which was the cause of the troublesome vomiting already alluded to, and which was quite distinct from the vomiting of irritation which occurs where abscess is situated near the inferior surface of the organ. The kidneys then ceased to eliminate the abnormal quantity of lithate of ammonia, and the balance of secondary assimilation for the time was restored. After a while the engorgement again took place, the relief being temporary; the lithate was again thrown down in the urine, and continued with slight intermission until convalescence proved that the entire function of assimilation was satisfactorily performed. I regard this as interesting in a pathological point of view, and corroborative of Dr. Prout's hypothesis.

There is another point to which I must just refer, without at all entering into the question. The patient from the time the abscess was opened, complained continually of a sensation of chilliness, even whilst the surface of her body to the touch felt hot and dry. Now, this symptom may, I think, be taken with the paralytic affection, and be considered as arising from impaired nervous energy, consequent upon so severe an attack of disease in so important an organ. But on the other hand it may be that this symptom was connected with an interesting question. If the views of some authors be correct, we may enquire how far the function of combustion, the evolution of caloric, was interfered with by this lesion of the liver; but this rather belongs to physiology than pathology, and I shall not attempt to enter upon it now.

Lastly, the question may be asked,—What is the present condition of the organ?

The *post-mortem* examinations of individuals who have died several years after recovery from hepatic abscess, have discovered no remains of the disease, excepting sometimes the existence of adhesions between the opposed surfaces of the peritoneum, and I believe in most cases the sac is perfectly obliterated. How is this effected? In similar cases, abcesses have been found difficult to heal, and some practitioners have attempted to close them by exciting adhesive inflammation in the sides of the sac; but suppurating, like mucous, surfaces, do not readily take on inflammation of an adhesive character, and the attempt has usually failed. The process of obliteration is, I believe, accomplished gradually, as the abscess was formed. As in the latter case absorption increased around the primary softening and infiltration; so afterwards, new healthy parenchymatous structure is laid down, gradually lessening the area of the sac, until nothing but the walls remain; these are at last absorbed themselves, and the organ regains its original integrity of structure. Where the

peritoneum has been inflamed, as in the present case, doubtless adhesions will be formed, but Mr. Twining remarks, that it is surprising how seldom they do exist, even in cases where the abscess was situated superficially and tended towards an exit through the abdominal parietes. Have I a right, then, to suppose that the liver in this case has recovered its original integrity? The only suspicious circumstance which leads me to doubt at all, is the occurrence of the occasional tumidity and serous oozing; and yet I can hardly think that the sac is still in existence, and rather believe that the oozing may be derived from the remains of the sinus. Be this as it may, I do not feel inclined to attempt to decide the question by the introduction of a probe, but enjoining the woman to take the strictest care of herself as regards diet, and exposure to wet or cold, I leave the matter for time to elucidate.

Bath, December, 1846.

CASE OF AMPUTATION OF THE THIGH UNDER THE INFLUENCE OF ÆTHER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

As the medical profession at this moment must feel deeply interested in the late discovery made by our Transatlantic friends, of the inhalation of æther producing that state of narcotism which renders persons insensible to the pain arising from surgical operations, I offer no apology for sending you the following brief account of an experiment as to its effect, which came under my own observation yesterday. My partner, Mr. Coleman, having occasion to perform amputation of the thigh upon a young woman of a highly nervous temperament, and who dreaded the pain of the operation exceedingly, we deemed it a favourable opportunity to test the efficacy of this new discovery. By the kind assistance of Mr. Julion, a talented young chemist, we prepared the necessary apparatus to conduct the experiment. The patient being brought to the edge of the bed, the tourniquet applied, and everything prepared to commence amputation, she began to inhale the æther, which produced a good deal of coughing, and it was with some difficulty we prevailed upon her to persevere, which she at length did;—not, however, in a very satisfactory manner, drawing only short inspirations, and then removing the tube from her mouth. After using it for the space of three or four minutes, her teeth became fixed, her eyes closed, and she sank back into the arms of an attendant, as if in a state of *complete intoxication*. Mr. Coleman now siezed this favourable moment, and very adroitly and expeditiously performed the flap operation. The patient struggled with her hands, and cried out for her mother, (who had been dead some years.) The sound limb was not held, nor did she move it, but frequently said "she would not have her leg cut off then;" indeed it was quite evident she was not aware of the operation being performed; for after the stump was dressed, and she was comfortably placed in bed, she said "it was not off, for her foot was asleep," and begged of some of us to rub it. On enquiring of her, some hours after the operation, what she had felt, she said "she thought she had been in a dream, and that we had hurt her leg, to see if she could bear the operation, which was to be performed the next day." She had no recollection of any cutting pain, nor could she tell the kind of pain she had suffered, but thought she remembered "hearing the bone sawed."

The narcotic effect of the æther soon subsided; for in putting in some sutures to bring the edges of the stump together, the passing of the needle through the skin, produced cries of the *most agonizing pain*, though her mind was not sufficiently restored to consciousness, to be aware of what was going on.

The result of this trial I cannot but think highly encouraging; and fully believe, that if the inhalation had been more perfectly accomplished, the state of insensibility would have been most complete. So satisfied am I, that we now possess a means of narcotizing pain, that I shall not hesitate to adopt it in any case where a painful surgical operation has to be undergone, taking care in future to render my patient thoroughly conversant with the mechanical process of inhalation, previously to the use of the æther.

I remain, Sir,
Your obedient servant,
GEORGE EDWARDS.

Wolverhampton, Jan. 2, 1847.

P.S. January 3rd. Our patient is going on very favourably, and still persists she had a dream during the operation.

Hospital Reports.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF WILLIAM SANDS COX, ESQ., AT THE QUEEN'S HOSPITAL, BIRMINGHAM.

By PETER HINCKES BIRD, one of the Resident Medical Officers.

CASE XVII.

FRACTURE OF THE BASE OF THE SKULL.

William Stock, aged 41, admitted July 11th into the Queen's Hospital, at half-past four o'clock p.m. He is a guard upon the Gloucester Railway, and is a very tall powerful man. It is stated that while the train from Gloucester was going along at full speed, he was standing with his back to the engine, on some luggage on the top of one of the carriages, and on going under an archway his head struck against the arch with great force. He immediately fell down insensible. He lost a considerable quantity of blood from a wound of the scalp before his admission.

When admitted he was in a complete state of coma, with stertorous breathing; dilated pupils, insensible to the stimulus of light; total loss of sensibility, and of power over the voluntary muscles; extremities cold,

the feet more so than the arms; pulse weak, very slow. about 30; considerable discharge of dark blood from the right ear. On examination there was found a lacerated wound of about four inches extent, situated over the junction of the two parietal bones at the sagittal suture; careful examination was made by the finger and by a probe, but no fracture or depression of bone was discovered under the wound on the scalp. There was considerable bleeding from the posterior temporal artery, which was easily arrested by a compress. The wound was lightly dressed and the patient put to bed.

He gradually got worse, without any re-action taking place, and expired at a quarter past five p.m., just three quarters of an hour after his admission.

The *post-mortem* examination was made the following morning. There was found extensive extravasation of dark coloured blood under the wound for some distance; in one place under the wound a small portion of the pericranium was detached. On taking off the calvarium the brain was found gorged with blood; the meshes of the arachnoid were plentifully filled with dark blood; serous fluid was also found in the ventricles. There was no fracture of the inner table under the seat of the wound. On removing the brain, however, an extensive comminuted fracture of the occipital bone was discovered, commencing on each side above the groove for the lateral sinus; that on the left side crossing the spine for the falx cerebelli, and extending into the lateral sinus of the right side; that on the right side crossing the fracture of the left side, and extending into the border which articulates with the petrous portion of the temporal bone. One portion of the fracture extended into the foramen magnum, the portions of bone forming which were very loose. One large portion of bone included within the lines of these fractures, was quite loose, so that it might be easily removed. A large quantity of black blood was effused at the base of the brain, and between the theca vertebralis and spinal cord. The cribriform plate of the ethmoid bone was also shattered.

Fractures at the base of the skull are extremely dangerous, because they are generally attended with extensive extravasation, or are followed by inflammation of the brain, in consequence of the great violence of the injury; so that they are generally regarded as inevitably fatal.

According to Sir Astley Cooper fractures at the base of the skull are produced from falls from a great height on the summit of the head; but they are also produced by violent blows on the vertex, and by heavy falls on the feet or tuberosities of the ischium. When it is produced by falls from a great height on the summit of the head, the whole weight of the body is received on the foramen magnum, and on the cuneiform process of the os occipitis, and in many instances, the consequence is a transverse fracture through the foramen magnum, the cuneiform process, and part of the temporal bone. The dura mater is generally lacerated and the substance of the lower surface of the brain itself wounded, and blood consequently effused at the base of the brain, and in some cases, caused by a greater degree of violence, not merely in this situation but in others.

This accident seems to have been caused by intense violence applied to the vertex; the consequence was a most extensive comminuted fracture of the occipital bone, accompanied with the symptoms of compression.

There is no symptom by which we can confidently diagnose fracture of the base of the skull. A discharge of blood from the ears is said to be a diagnostic symptom; in this case it was present on the right side, into the lateral sinus of which the fracture had extended itself. Sir Benjamin Brodie relates a case which was attended with hæmorrhage from the ear, where the source of the blood was found to be after death the lacerated cavernous sinus. Hæmorrhage from the ears, however, comes on sometimes from slight injuries not at all affecting the cranium or its contents; while other cases are met with, where, on dissection, extensive fractures are found of the petrous portion of the temporal bone, and of the sphenoid and ethmoid bones, though no bleeding at all had occurred from the ears, nose, or mouth. It is supposed that the deafness which sometimes remains during life, in rare instances of recovery, is the result of the discharge of blood into each meatus auditorius. A *post-mortem* examination is therefore the most convincing proof of death from fracture of the base of the skull.

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, JANUARY 13, 1847.

The Report of the Committee appointed at Norwich to take into consideration the publications of the Association with a view to their improvement, and the resolutions of the Central Council adopted in consequence, will have made known the changes intended to be introduced into the Journal. We have now only to state that every effort will be made to carry out these recommendations, and to render the Journal under its increased size, a record of the progress of Medical Science and Practice, giving special prominence to the provincial districts and to all subjects of interest to, or connected with, the Provincial Association.

In the present number the necessity of devoting a considerable space to the Report of the Committee, to the Memorial of the College of Physicians, and to the new Registration Bill, has necessarily led to the deferring of some communications belonging to the departments of Hospital Reports and Proceedings of Societies, (both of which it is intended should occupy a prominent place,) and to the omission of the General Retrospect; but while every subject

of interest to the general welfare of the profession, and the *status* of its members, will be at all times carefully attended to, it is to be desired that the *Provincial Journal* should be mainly occupied with information of a scientific and practical nature, the recorded experience of the members of the Association, and others who may contribute to its pages. The increased size will be found to allow of more elaborate communications,—the longer interval of publication will admit of more care in the selection of the original articles and other matters,—while the advantages arising from the facility of transmission by the post to all parts of the kingdom are still retained, and the members of the Association and subscribers to the Journal can receive it without trouble or delay within a few hours of its publication.

The pressure of other matter precludes any extended remarks, and we prefer that the Journal should carry with it its own recommendation; but we trust that when the arrangements are completed it will be found not only enlarged and improved, but altogether such as the members of the Association will estimate and approve.

Proceedings of Societies.

SHEFFIELD MEDICAL SOCIETY.

Sixth Session.—Sixth meeting, December 10th, 1846.

The President, Mr. TURTON, in the Chair.

Mr. Jackson exhibited drawings of a patient's legs with necrosis of the tibia, taken three years ago. He also exhibited the necrosed portions of bone lately removed by Mr. Beckitt.

ASCITES: HYDATIDS.

Dr. Branson exhibited a portion of fluid taken from the peritoneal cavity of a man aged 18. The fluid contained an immense number of hydatids, varying in size from that of a hen's egg to the most minute vesicle as seen under the microscope. The patient was under the care of Mr. Burman, of Wath, who had forwarded the fluid for exhibition, accompanied by the following history of the case:—

"Benjamin Downing, aged 18, first came under my care in December, 1839. He was then much emaciated, and had an enormously distended abdomen, which, on percussion, gave a perfectly distinct fluctuation. As he had taken large quantities of the usual medicines without benefit, I determined at once to tap him. Upon introducing the instrument, which was of the usual size, I was surprized to find that no fluid followed the withdrawal of the stilette; however, while I was still pondering upon the case, several small hydatids passed the canula, floating in a liquid strongly resembling, both in colour and consistence, the yolk of eggs. As I had fortunately with me a much larger instrument, which had been made for a particular case, I withdrew the smaller one and introduced it. The result was an immediate flow of fluid, mixed with an immense quantity of hydatids of various sizes, which continued till the end of the canula became obstructed by a larger cyst. This proved to be as large as a hen's egg, and I was compelled to rupture it by gently pressing against it with a female catheter; with which instrument I also succeeded in removing the empty cyst. In this tedious way I at least succeeded in emptying the peritoneal cavity, having abstracted fluid, hydatids, and ruptured cysts, amounting to upwards of twenty-four pounds in weight. Not a single bad symptom followed the operation; the poor fellow rapidly recovered, and I lost sight of him for upwards of five years, when I accidentally met on the road a fine tall muscular young man, who made himself known to me as the poor sickly boy upon whom I had operated at the time above mentioned. He had ever since that time been at very laborious work upon a railroad in Lancashire, and was then returning to resume that kind of labour, which he continued to do in perfect health, till about twelve weeks since, when after a severe cold the abdomen began to fill again rapidly. He came over from Lancashire and put himself under my care again, and last week I operated upon him, and removed about twenty-three pounds in weight of the same kind of mixture as I had done before, a portion of which I send you. The yellow colour is gone in a great measure, but you will find a number of transparent hydatids floating on the surface of the liquid, and many of the larger (broken) cysts at the bottom, which are thicker and opaque. In the more fluid part are seen under the microscope, a vast assemblage of minute vesicles, apparently hydatids in embryo, resembling in everything but their size the larger cysts. Since the operation the man is doing very well, and I hope will soon be able to resume his labours.

ASPHYXIA.

Mr. Law exhibited the liver, heart, and kidneys of an infirmary patient, aged 32, a married man, stout and well-formed a case-maker, who died of asphyxia, on the 26th of November, in the Infirmary, where he had been an in-patient six days. No satisfactory information was gathered respecting his habits, but it is believed that he had long been in the practice of drinking intoxicating liquors. There was ossification of the aortic valves, a condition which was sufficiently indicated during life by a loud bruit de soufflet accompanying the first beat, and heard best over the aortic valves. The liver was diminished, dense, granular, wrinkled, and of a yellow colour, presenting indeed a good example of the condition which has been termed "cirrhosis," but which term the exhibitor believed, is employed to designate several pathological changes of this organ. Although Dr. Baillie does not employ this term he has yet figured the disease; and he observes, "that it is commonly said to be scirrhus, but the morbid appearance is very different from the genuine scirrhus.

of the glands. It should rather be considered as a disease *sui generis*." Both Dr. Baillie and Dr. Marshall Hall, regard diminution as an essential element in the disease, and the latter adds, "it is uniformly attended by ascites but without icterus." In the case under consideration there were ascites and anarsarca, but no icterus. The kidneys were in the last stage of granular degeneration. It may perhaps be worth while to remark that this patient was considered on his admission into the Infirmary, to be labouring hopelessly under acute renal dropsy. The heart-disease was regarded as chronic, and the liver affection was not and indeed could not have been detected on account of the ascites. The urine was examined the day after admission, and again the day before he died. On the first occasion its specific gravity was 1.012, on the second 1.015; it was coagulable on neither of these occasions. Of the urine in the earlier stages of the disease, nothing is known. Perhaps it is not quite obvious how far coagulable urine is connected with that structural lesion called Bright's disease.

RUPTURE OF THE POSTERIOR TIBIAL ARTERY; AMPUTATION: PHLEBITIS.

Mr. Micklethwait then related the following case:—A married woman, aged 51, was admitted into the Hospital in September, 1844. The whole of the back of the right leg from the popliteal space to the ankle was uniformly swollen, was red, painful, and tender; no pulsation or bruit could be detected over the swelling, which had existed nearly two months previous to her admission. At the end of a month the lower part of the leg was reduced to nearly its natural size, but in the situation of the belly of the gastrocnemius it continued as large as ever. During the next fortnight the leg increased in girth, and became generally softer; there was a well-marked sense of fluctuation between the heads of the gastrocnemius, and the pain had become much more severe, and in addition, there was an œdematous state of the dorsum of the foot. At the end of another month the countenance had become sallow and extremely haggard; the pain was even more severe, and there was a secretion of a yellowish green transparent fluid from the skin, which at this part was thickened and appeared irregularly roughened. In one place a small excrescence, soft, smooth, and shining, had appeared, and the outer and back part of the calf of the leg had also become of a purplish hue, with enlarged cutaneous veins, the swelling thus assuming an aspect of malignancy. The sense of fluctuation remained distinct. After a fornight's interval of comparative ease, a violent attack of pain recurred without apparent cause, and continued for some days in spite of frequent and large doses of morphia. As she was anxious for something more to be done, an incision was made into the tumour, when its contents proved to be coagulated blood. On passing the finger through the clot, florid arterial blood gushed out profusely; the tourniquet was tightened and immediate amputation determined upon.

On the tenth day after the operation she had a severe rigor, unattended by pain in any part, or by cough, but there was increased rapidity of the pulse, which was exceedingly small. There was more restlessness and uneasiness from position, the features became extremely pinched, emaciation increased, and there was complete loss of appetite. Notwithstanding the free administration of stimulants, the rigors continued, and the weakness increased. Slight cough came on unattended by pain even on deep inspiration; respiration became hurried and obstructed, the pulse extremely feeble, and she gradually sank.

On dissecting the leg, the gastrocnemius was found expanded tightly over a cyst. On removing the soleus, a cyst was exposed, formed apparently by the deep fascia of the leg. The cyst seemed girt from above downwards, along the inner third by a tight cord, which proved to be the posterior tibial artery, vein and nerve. The cavities of the two former were not obliterated, but impervious from pressure; the vessels curved outward and forward to join the popliteal above, and resumed their natural position below the cyst. On opening the vessels, their inner surface seemed healthy. There was a small longitudinal rent in the anterior wall of the posterior tibial artery, about three-quarters of an inch from its origin, communicating with the cyst. The interosseous ligament was forced forwards, so as to be convex anteriorly instead of flat, and the posterior surface of the tibia was denuded of its periosteum, and rough.

The body was examined sixteen hours after death; it was much emaciated. There was nothing abnormal in the appearance of the stump; the divided structures were already contracted and agglutinated by organized lymph. The artery seemed healthy and pervious to within an inch of the ligature; this part was filled by a clot not yet conical, for the end of the artery was not completely contracted. The vein was blocked up from the divided end to the point where the internal, iliac joins the external iliac vein; the divided end was perfectly contracted. On opening the vein, and passing upwards for about two inches and a half, the diminished vessel was completely filled by coagulum, and in one part of this, entirely within it, was a small collection of matter, about the size of a hempseed; the next three inches were filled by a dirty brownish-red mixture of blood and pus. Higher up the vein was filled by adherent coagulum, and in the substance of this, an inch and a half below Poupart's ligament, was another abscess as large as a cherry stone; the contents of this, as well as the other, were thick, whitish, unequivocal pus. The internal iliac vein was filled with free pus. The common iliac and vena cava were pervious and apparently healthy. The glands in the groin were enlarged, but healthy in structure. There were small deposits of pus under the mucous membrane of the os uteri and adjacent part of the vagina. The uterus was oblique, and one lateral ligament considerably shortened; the ovary and Fallopian tube of that side being firmly adherent by lymph. Several patches of acute inflammation, with deposits of light reddish-brown lymph, were found in the spleen, and in the centre of one patch there was semi-purulent fluid. The liver was healthy, except in one part of its upper surface, which presented an ecchy-

mosed appearance, but which really consisted of a number of small veins distended with blood in an arborescent form. In the upper lobe of the right lung, not the apex, two deposits about the size of nuts were found, of a yellowish-white friable matter, much resembling recently deposited lymph and pus. The lower lobe of the left lung gave evidence of previous pneumonia. There were no tubercles, nor was any disease found in the other organs.

Mr. Micklethwait mentioned two other fatal cases of phlebitis following amputation, and remarked that no allusion to this somewhat unusual termination is to be found in either the works of Sir Astley Cooper or Mr. Fergusson.

MR. WAKLEY'S MEDICAL REGISTRATION BILL OF 1847.

A BILL

For the Registration of Qualified Medical Practitioners, and for Amending the Law Relating to the Practice of Medicine in Great Britain and Ireland.

Preamble.—Whereas the laws relating to the Practice of Medicine in Great Britain and Ireland are numerous, complicated, and contradictory, and the public possesses no certain means of distinguishing between legally qualified physicians, surgeons, and apothecaries, and the mere pretenders to a knowledge of medicine and surgery, and it is desirable that the names and qualifications of the regularly educated practitioners in medicine should be duly registered by competent authority:

1. *Registrars to be appointed.*—Be it enacted, by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, That one of Her Majesty's Principal Secretaries of State shall, within one month after the passing of this Act, nominate and appoint three fit and proper persons, being at the time of such appointment qualified to be registered under the provisions of this Act, to be the registrars for carrying this Act into execution, one such registrar to be called the "Medical Registrar for England," another, the "Medical Registrar for Ireland," and the third, the "Medical Registrar for Scotland," and that he shall also from time to time appoint such clerks and other officers as he, the said Secretary of State, shall deem necessary for the assistance of the said registrars in carrying into execution the provisions of this Act; and that the said Secretary of State may at his discretion remove any registrar or other person so appointed aforesaid; and that upon the death or resignation of as any such registrar or other clerk or officer as aforesaid, or other vacancy in either of the offices so filled, the said Secretary of State shall appoint other proper persons to be such registrars, clerks, and officers respectively; and there shall be paid to the said registrars, clerks, and messengers, out of any monies to be received by the said registrars by virtue of this Act, such salaries as shall be from time to time fixed and allowed by the Lord High Treasurer or the Commissioners of Her Majesty's Treasury, who may also allow such reasonable travelling expenses as may be incurred by any registrar, clerk, or messenger in the performance of his duties under this Act, and such other reasonable expenses for putting and carrying this Act into execution, as the said Lord High Treasurer or the Commissioners of Her Majesty's Treasury shall think fit.

2. *Monies to be paid to Medical Registration Fund of Great Britain.*—And be it enacted, that all monies received by the registrars aforesaid, in carrying this Act into execution, shall be paid by them into the Bank of England, at such times and in such a manner as the Secretary of State aforesaid shall direct, to the credit of the Lord High Treasurer, or the Commissioners of Her Majesty's Treasury, and in the name of the "Medical Registration Fund of Great Britain and Ireland."

3. *Registration of Names, &c., of Qualified Medical Practitioners.*—And be it enacted, that the several registrars shall, within thirty days after their appointment, and from time to time aftewards, register, according to the form in schedule (A) to this Act annexed, in books to be kept for that purpose, and without any fee whatsoever, the name and place of residence, together with a description of the legal qualification or qualifications, with the date or dates thereof, of every physician, surgeon, and apothecary who shall apply to be registered, and who, prior to the passing of this Act, shall have taken a degree in medicine in any English, Irish, or Scotch University, or who shall apply to be registered, and shall produce his diploma, certificate, or license, or other proof of his having obtained a diploma, certificate, or license to practise as a physician, surgeon, or apothecary, dated prior to the passing of this Act, and granted by any English, Irish, or Scotch University, College, or Society, or any corporation, sole or aggregate, in England, Ireland, or Scotland, legally entitled to grant the same; and also of every person who shall apply for the same, who was actually practising as an apothecary in England and Wales prior to the first day of August, one thousand eight hundred and fifteen, and who shall sign a declaration according to the form in schedule (B) to this Act annexed, and also of every surgeon and assistant surgeon of the army and navy, and in the service of the Honourable the East India Company, who shall apply for the same, and of every physician, surgeon, and apothecary, upon the payment of *Two pounds*, who, *after* the passing of this Act, shall take a degree in medicine as aforesaid, or produce a certificate, licence, or diploma as aforesaid, dated subsequently to the passing of this Act.

4. *Registrars to issue Annual Certificates to Registered Practitioners.*—And be it enacted, that the several registrars aforesaid shall issue a certificate, according

to the form in schedule (C) to this Act annexed, to every person who shall have been registered as aforesaid, and who shall apply for the same; and be it further enacted, that the said registrars shall issue such certificates for those parts of Great Britain and Ireland only for which they shall severally be appointed to act.

5. *Payment of Five Shillings for Certificate.*—And be it enacted, that every person shall, upon his application for such certificate, pay to the registrar a sum not exceeding *five shillings*, and such certificate shall bear date on the day on which the same shall be issued, and shall thence continue in force until the thirty-first day of December, one thousand eight hundred and forty———, and no longer; and the said registrars, on or before the fifteenth day of December, in every subsequent year, upon the application of any person who shall be then registered, shall issue such certificate to such person in like manner in all respects as aforesaid, subject to the payment of a sum not exceeding *five shillings* as aforesaid, which said certificate shall take effect on the first day of January then next ensuing, and shall continue in force during one year, and no longer.

6. *Registrar to keep a Record of Certificates.*—And be it enacted, that each of the said registrars shall duly record in a book an account of every certificate which he shall issue as aforesaid, and in the month of January in every year shall cause to be printed a correct register, arranged alphabetically, of the names of all persons to whom he shall have so issued certificates during the year then last past, according to the provisions of this Act, together with their places of abode, and a description of their legal qualification or qualifications, with the date or dates thereof, and such registers shall be respectively called, "The Medical Register for England," "The Medical Register for Ireland," and "The Medical Register for Scotland;" and a printed copy of the register for the time being, so published as aforesaid, shall be evidence in all courts, and before all justices of the peace and others, that the persons therein specified have obtained a certificate according to the provisions of this Act; and the absence of the name of any person from such printed copy shall be evidence, until the contrary be made to appear, that such person has not obtained a certificate according to this Act; and copies of such Medical Registers shall be furnished by the respective registrars to every person who shall apply for the same, upon the payment of a sum not exceeding *one shilling* for each copy.

7. *Persons accidentally omitted from Register may obtain Certificate on paying Twenty Shillings.*—And be it enacted, that if any person entitled by this Act to obtain a certificate as aforesaid, whose name and place of residence, and a correct description of whose qualification or qualifications, with the date or dates thereof, do not appear in such Medical Register as aforesaid, shall at any time apply for a certificate to any of the registrars aforesaid, and shall prove, to the satisfaction of such registrar, either that he is a person whose name, through neglect, accident, or mistake, has been omitted from the Medical Register then current, or that he purposes commencing or resuming practice, or changing his residence, before the first day of January in the ensuing year, every such applicant shall be entitled to obtain, from the registrar appointed for that part of the United Kingdom in which he resides, upon payment of twenty shillings, and sending his name and then place of residence, together with a description of his qualification or qualifications, with the date or dates thereof, a certificate as aforesaid, to continue in force until the thirty-first day of December then next ensuing.

8. *Repeal of Restrictions on Practice excepting such as are in this Act.*—And whereas it is just and expedient that all registered persons possessing certificates, in force as aforesaid, should be entitled to practise medicine in that part of the United Kingdom for which their certificates are issued; Be it therefore enacted, that so much of any Act or Charter granted before the passing of this Act as prohibits any person from practising medicine, physic, or surgery, in any place without such licence as is mentioned in any such Act or Charter respectively, or that imposes any restriction or penalty on the practise of medicine, physic, or surgery, further than is contained in this Act, shall be and the same is hereby repealed and annulled.

9. *Registered Persons entitled to Practise where Certificates are issued.*—And be it further enacted, that every person who shall be registered, and shall possess a certificate in form, according to the provisions of this Act, shall be entitled, without other licence than such registry and certificate, to practise medicine throughout that part of the United Kingdom in which his certificate was issued, and such person shall be deemed qualified to be appointed therein to any medical office in any public or other institution.

10. *Registered Practitioners entitled to Charge for Visits and Attendance.*—And be it enacted, that all persons who shall be registered and possess certificates according to the provisions of this Act, shall be entitled to demand and recover, in any court of law, with full costs of suit, reasonable charges for medical or surgical advice, visits, and attendance, rendered by them to their patients in any part of Great Britain and Ireland, without any other licence than such registry and certificates.

11. *None but Registered Persons or those in Practice before the passing of this Act to recover Charges.*—And be it enacted, that after the passing of this Act no person shall be entitled to recover any charge in any court of law for any medical or surgical advice, attendance, or operation, or for any medicine prescribed or administered by him, unless he shall prove upon the trial, either that he is registered under this Act, or that he was legally practising in the capacity in which he claims such charge before the passing of this Act.

12. *Repeal of Enactment requiring Five Years' Apprenticeship to an Apothecary. (Fifty-fifth George III., cap. 194, s. 15.)*—And whereas, by an Act passed in the fifty-fifth year of the reign of King

George the Third, entitled, "An Act for better regulating the Practice of Apothecaries throughout England and Wales," it was enacted "that no person shall be admitted to any examination for a certificate to practise as an apothecary unless he shall have served an apprenticeship of not less than five years to an apothecary;" and whereas the said enactment having been found to obstruct the efficient education of students in medicine, it is expedient that the same should be repealed; Be it therefore enacted, that so much of the said recited statute as requires the serving of such an apprenticeship as aforesaid shall be and the same is hereby repealed.

13. *Summary Penalty against Unregistered Practitioners. (Fifth George III., c. 194, s. 20.)*—And be it further enacted, that if any person shall, after the ——— day of ——— 18—, act or practise as a physician, surgeon, or apothecary, in any part of Great Britain and Ireland, without being duly registered according to the provisions of this Act, and without having a certificate as aforesaid in force at the time of his so practising or acting as a physician, surgeon, or apothecary, he shall, on conviction before any magistrate having jurisdiction in the county, city, or place where the offence was committed, forfeit and pay a sum not exceeding *five pounds*, nor less than *forty shillings*, for every such offence, to be recoverable within three months next after the commission of the said offence, under a warrant signed by the said magistrate, by distress and sale of the offender's goods and chattels.

14. *Penalty on Unregistered Persons far acting as Medical Officers.*—And be it enacted, that every person appointed after the passing of this Act to any medical or surgical office for which he is not qualified according to the provisions of this Act, and who shall act or practise in such office, shall for every such offence forfeit a sum not exceeding *five pounds*, nor less than *forty shillings*, to be recovered as is hereinafter described.

15. *Persons not possessing Certificates incapable of acting as Medical Officers in Public and other situations.*—And be it enacted, that from and after the first day of January one thousand eight hundred and forty —, no person who does not possess a certificate in force according to the provisions of this Act, shall be capable of holding any appointment in any part of Great Britain or Ireland in the capacity of a physician, surgeon, apothecary, or other medical officer in any hospital, infirmary, dispensary, lunatic or other asylum, lying-in hospital, gaol, penitentiary, house of correction, house of industry, parochial or union workhouse or poorhouse, parish union or other public establishment, body, or institution, or to any friendly or other society for affording mutual relief in sickness, infirmity, or old age; and the certificate or evidence of any person not possessing a certificate as aforesaid, given after the passing of this Act, shall not be received as the certificate or evidence of a physician, surgeon, or apothecary, or medical or surgical practitioner, in any court of law or equity, or in any matter or thing in which by law or custom the certificate or evidence of a physician, surgeon, apothecary, or medical or surgical practitioner, is or shall be required.

16. *Penalty for wilful falsification of the Record of Certificates by any Registrar.*—And be it enacted, that if any registrar under this Act shall wilfully make or cause to be made any falsification in any matters relating to any register, certificate, or record aforesaid, every such offender shall be deemed guilty of a misdemeanour; and shall, on conviction thereof, be sentenced to be imprisoned for any term not exceeding *six months*.

17. *Penalty for obtaining Certificate by False Representations.*—And be it enacted, that if any person shall wilfully procure or attempt to procure a certificate from any registrar, by making or producing, or causing to be made or produced, any false or fraudulent representation or declaration, either verbally or in writing, or shall by any false or fraudulent means whatsoever possess, obtain, use, or attempt to possess, obtain, or use, any certificate as aforesaid, every such person so offending, and every person aiding and assisting him therein, shall, upon being convicted thereof, be adjudged guilty of a misdemeanour in England and Ireland, and in Scotland of a crime and offence; and thereupon it shall be lawful for the court before whom such offender shall be tried and convicted, to sentence such offender to be imprisoned, with or without hard labour, for any period of time not exceeding three calendar months.

18. *Penalty for False Pretences of Qualification.*—And be it enacted, that every unregistered person who shall wilfully and falsely pretend to be, or take or use the name or title of a physician, doctor, bachelor of medicine, surgeon, or apothecary, or any name, title, addition, or description, implying that he is registered under this Act, or that he is recognised by law as a physician, or surgeon, or apothecary, or a practitioner in medicine or surgery, shall, on being convicted of every such offence before any magistrate having jurisdiction therein, pay a sum not exceeding *five pounds*, nor less than forty shillings, to be recoverable as is hereinafter described.

19. *How Penalties are to be recovered: if not paid, the offender may be committed.*—And be it enacted, that any justice of the peace acting in and for the county in which the offence has been committed, or any magistrate appointed by virtue of an Act passed in the second and third years of the reign of her Majesty Queen Victoria, intituled, "An Act for regulating the Police Courts of the Metropolis," or one of the justices of peace courts in Scotland, may hear and determine any complaint charging any person with practising medicine without a certificate as aforesaid, on the oath of one or more witnesses, or by his own confession, and shall award the penalty or punishment herein provided for such offence. And be it enacted, that in every case of the adjudication of a pecuniary penalty under this Act, and of non-payment or non-recovery thereof by distress, it shall be lawful for the magistrate to commit the offender to any gaol or house of correction

within his jurisdiction, for a term not exceeding *one* calendar month when the sum does not exceed *forty shillings*, and for a term not exceeding *three* calendar months when the sum does not exceed *five pounds*.

20. *Application of Penalties.*—And be it further enacted that any sum or sums of money arising from conviction and recovery of penalties for offences committed against the authority and provisions of this Act, shall be paid to the account of the Medical Registration Fund aforesaid, towards defraying the expenses of this Act.

21. *Uniformity of education, qualificatirn, and fees throughout the kingdon.*—And be it enacted, that the several colleges and other examining bodies shall, from time to time, prepare and lay before the said Secretary of State a scheme or schemes of the course of study, and particulars of the examination, to be passed by all persons applying to such colleges and other bodies respectively for letters testimonial as a physician, or surgeon, or apothecary, and also an account of the fees proposed to be taken by the said colleges and bodies respectively for such letters testimonial. And whereas it is expedient and desirable that the qualifications and fees for the said testimonials should be uniform, according to the nature thereof, throughout Great Britain and Ireland; such scheme or schemes shall therefore be of no force or effect until they shall have been submitted to her Majesty in council, and shall have received her Majesty's sanction and approval.

22. *Inspection and Supervision of Examinations.*—And be it enacted, that the said Secretary of State may, from time to time, require returns to be made in such form, and including such particulars as he shall think fit, respecting the examination to be conducted for medical degrees, diplomas, and licences, and it shall be lawful for any person deputed by the said Secretary of State, being a physician, surgeon, or apothecary, registered under this Act, to be present at any of the said examinations, and to report to the said Secretary of State, and if he shall be of opinion that the regulations approved by her Majesty in council for the examination and grant of letters testimonial as physician, surgeon, or apothecary, have been infringed, evaded, or neglected by any of the examining bodies, it shall be lawful for the said Secretary of State to admonish the said offending body; and if such admonition be neglected, then to direct the registrars as aforesaid to refuse to register upon the testimonials of the body so in default, until the conduct of such body shall be altered to the satisfaction of the said Secretary of State.

23. *Examiners may take Candidates to Hospitals, &c. for practical Examination.*—And be it further enacted, that the duly appointed examiners of candidates for degrees, diplomas, and licences in medicine, shall be empowered, under such regulations and restrictions, and at such times, as shall be approved by the Secretary of State as aforesaid, to attend with the candidates for examination at the public hospitals, or other public medical institutions, and also at any workhouse, for the purpose of ascertaining the practical knowledge of such candidates, from an inspection of sick and diseased persons.

24. *Act not to affect examinations of Students of Two Years' standing.*—And be it enacted, that students in medicine who at the time of the passing of this Act shall have been engaged two years and upwards in attending lectures in any medical school, or the practice of a public hospital, or other institution, in conformity with the regulations of any college having power to confer degrees or diplomas in medicine or surgery, shall not be affected, while completing their studies, or in passing their examinations, by anything in this Act contained; but such students shall be entitled to complete their education, and undergo their examinations, as though this Act had not been passed.

25. *Act not to extend to Dentists or Cuppers in business before 1st September, 1816.*—And be it enacted, that not anything in this Act contained, shall extend, or be construed to extend, to the profession or business of any dentist or cupper, who has engaged in such profession or business on or before the first day of September, eighteen hundred and forty-six; but every such dentist or cupper shall conduct such profession or business in as free and ample a manner as though this Act had not been passed.

26. *Act not to affect the trade or business of Chemists and Druggists.* (*Fifty-fifth George III., c.* 194, *s.* 28.)—Provided always, and be it further enacted, that nothing in this Act contained shall extend, or be construed to extend, to prejudice, or in any way to affect, the trade or business of a chemist and druggist, in the buying, preparing, compounding, dispensing, and vending drugs, medicines, and medicinable compounds, wholesale or retail; but all persons using or exercising the said trade or business, or who shall or may hereafter use or exercise the same, shall and may use, exercise, and carry on the same trade or business in such manner, and as fully and amply, to all intents and purposes, as the same trade or business was used, exercised, or carried on by chemists and druggists before the passing of this Act.

27. *Registered Medical Practitioners exempted from serving on Juries, Inquests, &c.*—And be it enacted, that every person who shall be registered and possess a certificate in force under the provisions of this Act shall be exempt, if he shall so desire, from serving on all juries and inquests whatsoever, and from serving all corporate, parochial, ward, hundred, and township offices, and in the militia, and that the name of such person shall not be returned in any list of persons liable to serve in the militia, or in any such office as aforesaid; and no person shall be entitled to such exemption as aforesaid on the ground of being a physician, surgeon, or apothecary, who does not possess such certificate then in force as aforesaid, any Act to the contrary notwithstanding.

28. *Expulsion of Registered practitioners for disgraceful conduct.*—And be it further enacted, that if registered practitioners shall at any time complain to

the council of any medical college or other governing medical body, that a person who had obtained his diploma or other qualification from such college or body has been conducting himself in a manner calculated to bring scandal and odium on the profession, by publishing indecent advertisements or pamphlets, or immoral or obscene prints or books, or has been guilty of any other disgraceful and unprofessional behaviour, the said council or governing body aforesaid are hereby empowered to cite the person accused before them, first giving him due notice and a full statement of the charges against him; whereupon the said council or other body, having heard the defendant, and being satisfied that the charges have been proved, or, in default of his appearance, having decided that the charges are proved, they are hereby authorized to erase the name of such person from the rolls of the said college or other institution, and shall transmit forthwith to the registrar of that part of the kingdom wherein such college or other institution is situated, an official report of their decision, authenticated by the seal of such college; and the said registrar shall thereupon strike out the name of the offending party from the register in his custody; and it shall ever afterwards be excluded from every register to be kept under the provisions of this Act, unless the council or other governing body by whom the name was first erased shall re-admit it into the rolls of their college or other institution.

29. *Names of Criminal Practitioners to be Erased from the Register.*—And be it enacted, that if any registered physician, surgeon, or apothecary, shall be convicted, in England or Ireland, of any felony, or in Scotland, of any crime or offence inferring infamy, or the punishment of death or transportation, or if it shall be found, by the judgment of any competent court, that any such physician, surgeon, or apothecary, shall have procured a certificate under this Act by any fraud or false pretence, or that any such physician, surgeon, or apothecary, has wilfully and knowingly given any false statement, evidence, or certificate, in any case in which by law the evidence or certificate of a physician, surgeon, or apothecary is required, every registrar, on production before him of an office copy, or extract of the conviction or judgment of the court duly certified under the hand of the proper officer of the court, shall cause the name of such physician, surgeon, or apothecary, to be erased from the register; and every person whose name shall have been so erased after such conviction or judgment as aforesaid, shall thereby forfeit and lose all the privileges of a registered medical practitioner provided by this Act.

30. *Interpretation Clause.*—And be it enacted, that the words "medicine" and "medical," when used in this Act, shall also mean and include the words, "physic," "surgery," and "surgical."

31. *Public Act.*—And be it further enacted, that this Act shall be deemed and taken to be a public Act, and shall be judicially taken notice of as such by all judges, justices, and others, without being specially pleaded.

SCHEDULES TO WHICH THIS ACT REFERS.

SCHEDULE (A.)

THE MEDICAL REGISTER FOR ENGLAND,

Consisting of the Names, Qualifications, with the Dates thereof, and Places of Residence, of all persons legally authorised to practise Medicine in England and Wales in 1848.

NAMES.	QUALIFICATIONS, AND THEIR DATES.	PLACES OF RESIDENCE.
Addison, James Price	Degree of M.D. from the University of Edidburgh, dated August, 1830.	No. 16, Tudor-street, Manchester.
Adlard, Hugh.....	Diploma as Fellow of the Royal College of Surgeons, Ireland, dated June, 1841.	No. 7, Milton-street, Hanover Square, London.
Admonds, Richards..	Licence of the Society of Apothecaries, London, dated March, 1834.	No. 19, Millsom-street, Exeter.
Adney, Ralph.....	Licence of the Royal College of Physicians, London, dated April, 1839.	No. 54, Holland-street, Liverpool.
Adpart, Erasmus	Diploma as Member of the Royal College of Surgeons of England, dated November, 1843.	No. 40, Tollville-street, Leeds.
Adwin, Gilbert.....	Declaration as required by the Act, of having practised as an Apothecary before 1st August, 1815.	The Grove, Camberwell, Surrey

SCHEDULE (B.)

DECLARATION required of a person who claims to be registered an APOTHECARY upon the ground that he was in practice as an Apothecary before the first day of August, 1815.

To the Medical Registrar for England.

I [Samuel Baker,] residing at [6, Duke Street, Exeter,] in the County of [Devon,] hereby declare that I was practising as an Apothecary at [16, George Street, Hastings,] in the county of [Sussex,] before the 1st day of August, 1815.

(Signed,) [*Samuel Baker.*]

Dated this [6th] day of [October,] 1847.

SCHEDULE (C.)

THE MEDICAL REGISTER FOR ENGLAND.

Registration Certificate for 1848.

By virtue of the powers vested in me by an Act of Parliament passed in the eleventh year of the reign of her Majesty Queen Victoria, intituled, "An Act for the Registration of Qualified Medical Practitioners, and for amending the law relating to the Practice of Medicine in Great Britain and Ireland;" I hereby certify, that [JAMES HOWARD,] residing at [15, Ormond

Street, Manchester,] in the [county of Lancaster,] has been duly registered according to the provisions of the said Act, as a person who is qualified to practise medicine in any part of England and Wales, and that he is entitled to exercise all the powers and privileges conferred by the said Act.

This certificate to remain in force until the 31st day of December, [1848,] and no longer.

(Signed,) [*Henry Brown,*]
Medical Registrar for England.

Dated, London, 6th October, 1846.

A MEMORIAL

Presented to the Rt. Hon. Sir George Grey, Bart., M.P., *Her Majesty's Principal Secretary of State for the Home Department, by the* Royal College of Physicians of London, *August* 8, 1846.

The President and Fellows of the Royal College of Physicians are induced respectfully to address Sir George Grey, as Her Majesty's Secretary of State for the Home Department, because they are unable, without the aid of the Legislature, to complete certain changes in their constitution which appear to be called for by the state of the Profession and of society, and which they have long contemplated and desire to carry into effect.

The College is bound by its charter of incorporation, granted by Henry VIII, and subsequently confirmed by Act of Parliament, to examine and to license, if found competent, all persons who desire to practise as Physicians in London and within seven miles round. But the office of examining and licensing those who wish to practise beyond seven miles from London was given by the Act which confirmed the Charter, not to the College at large, but to a small Body composed of eight of its Members, termed Elects. The Elects not having been chosen, even at first by the Members at large, are endowed with separate functions, which they exercise independently of the College, the constitution of their Body being such, that all vacancies occurring in it are required to be filled up by the survivors.

As might be expected, inconveniences have arisen from this divided jurisdiction. And it is worthy of observation, that amongst all the grievances complained of in the Petitions for Medical Reform which were presented at one time, in great number, to Parliament, none were complained of more than the existence of local and exclusive jurisdictions; and the exercise, by numerous independent Bodies, of the power of examining and licensing Medical Practitioners. The latter circumstance, it was alleged, had caused a want of uniformity in the education and qualifications of Practitioners passing under the same denomination; and from the former circumstance it has resulted, that Licenses valid in one part of the Country are invalid in another,—a restriction which proves most detrimental to the good of the Profession, and even leads frequently to an infringement of the Laws.

Of late years it has happened that the demand by Physicians for Licenses to practise in the Country (termed Extra-Licenses,) which was formerly small, has been greatly increased: hence the evils and inconvenience of the Licenses emanating from the College being divided into two kinds, and of their being granted by separate Bodies, have become strikingly manifest, and have given rise to complaints, and caused disputes and dissensions in various parts of the Country.

Moreover, the Act of Parliament, already referred to, has also given to the Elects the function of choosing annually one of themselves to be the President of the College. It has been thought that this part of the constitution of the College is susceptible of improvement; for that the choice of the President ought not to be deputed to so small a body, which is neither elected by the Fellows at large, nor under their control.

For the reasons which have been stated, the College is desirous that a short Act of Parliament should be passed, enabling it to accept a Charter modifying its former Charter, as regards the Elects, and transferring their functions to the general Corporation. An Act for this purpose was in fact prepared, with the sanction and co-operation of the late Government, and laid before Parliament. But it proceeded no farther, because it was introduced in conjunction with other measures affecting the Profession more widely, which were subsequently abandoned.

There are other improvements, lying more within its own power, to which the College has of late years directed its earnest attention.

In particular, it has extended, and greatly improved the examinations of those whom it licenses to practise as Physicians.

With respect to those who are admitted as Fellows or Members of the Corporation, during very nearly two centuries, they were required, by the Bye-Laws of the College, almost exclusively to have been educated at the English Universities; so that by long prescription the Graduates of Oxford and Cambridge were admitted nearly as a matter of course into the order of Fellows; and, beside them, few indeed either were, or could be elected.

The object of this regulation was to ensure in the Fellows of the College the best and highest education. And it had, confessedly, the effect of raising highly the character of the College, and, through its influence, that of all orders of the Profession in this country.

Nevertheless the exclusiveness of the rule excited jealousy and discontent, and became a cause of frequent litigation, until, by repeated decisions of the Courts of Law, the right of the College to be the sole judge of the qualifications of those whom it would elect as Fellows had been established beyond dispute.

In the present century, a high standard of education being adopted more generally, the restriction in favour of the Universities of Oxford and Cambridge, which had been enforced so long by the College, became proportionately less requisite and proper.

Wherefore the College, although still retaining a conviction of the superior advantages to be derived from an education in those Universities with which it had been so long connected, has, nevertheless, rescinded its exclusive Bye-Laws.

For several years the Fellows have been selected out of the Order of Licentiates; solely from regard to their character and attainments, and without distinction as to the place of their education.

To a considerable extent this plan has proved satisfactory to the Profession. Yet a system of selection is attended always with some invidiousness. Therefore the College has resolved to adopt another principle in the admission of Fellows, not liable to the foregoing objections, which will be perfectly equitable in its operation, and most honorable to those who avail themselves of it: viz., that the ordinary mode of admission to the Fellowship shall be through an examination, high in character, comprehensive in extent, and open to all Licentiates who may submit themselves voluntarily to it. Whilst, at the same time, a limited power shall be preserved to the College of admitting as Fellows, without examination, those persons who may have greatly distinguished themselves by scientific pursuits and discoveries; who, not having enjoyed the advantage of the best early education, may have made up for this deficiency by superior talents and energy, but whose age may be such, as well as their known attainments, that they ought to be exempted from the examination intended for younger men.

As far as the College is concerned, the changes and improvements which have been mentioned might have been effected earlier, had they not been retarded by circumstances over which the College could have no control. An outline of the Reforms contemplated by the College was submitted to the Marquis of Normanby when Secretary of State, and was favourably entertained by his Lordship. A change, however, in the Government followed soon afterwards, and delayed further progress.

The subject of these Reforms was repeatedly brought under the consideration of Sir James Graham, and they met with his approval; but it seemed to him expedient that they should be brought forward simultaneously with the general measures which he contemplated for the regulation of the whole Medical Profession.

In consequence of the desire then expressed by the Government, the College proceeded, with the assistance of its own legal advisers and those of the Crown, and with considerable pains and expense, to prepare the Draft of a new Charter, modifying its former Charter in the way which has been already explained.

The title of the College of Physicians of London was to be changed by the new Charter to that of the "Royal College of Physicians of England;" and, by one of its clauses, the College offered, for one year after its acceptance, to admit as Members, without examination, all Graduates of British Universities of a certain standing, now practising throughout England and Wales.

A conciliatory measure of this kind appears to be much required in the present state of the Medical Profession; for there are many Physicians practising in England, not being Graduates of Oxford or Cambridge, who yet are not, as legally they ought to be, possessed of a License from the College of Physicians of London.

Therefore the College proposed this measure as the commencement of a more regular and effective system, and in order that it might, more perfectly than is possible at present, represent and regulate the interests of all Physicians in this country.

The College will be ready to abide by the offer and concession which it then thought right to make, provided means can be devised whereby all Physicians practising in England and Wales shall henceforward (reserving the rights of the Universities of Oxford and Cambridge,) be required to submit their pretensions to the Censors' Board, (to which the College deputes the Examination of those whom it licenses,) in order that their competency may be properly tested, and that they may be enrolled as Members of the College.

By another Clause in the new Charter, power was given to the College, in certain specified cases, to expel unworthy Members. As circumstances sometimes arise requiring the exercise of such a power, the College believes that it would be expedient that it should possess it. A similar power has recently been given by Charter to the College of Surgeons.

It was also provided by the new Charter, that persons who having exceeded the age of forty years, and, having been duly examined by the College, are found competent to practise as Physicians, shall be entitled to use the designation of Doctor of Medicine, although not Graduates of any University. Whereas, for all Candidates who present themselves for the License under the age of forty, it is made an indispensable requisite that they should have obtained the Degree of Doctor of Medicine in some recognised University, before they can be admitted to examination by the College.

The reason of this distinction is, that in a practical Profession, like that of Medicine, it is always right that those who, by superior talents and industry, have raised themselves in public estimation, should have the power of rising from a lower even to the highest rank in the Profession. It seems reasonable that the College, to which such persons must apply for Legal Authority to practise as Physicians, should be empowered to confer the title, which through common usage is necessary to render the License intelligible by the Public and useful therefore to the possessor of it. In this way a want which is occasionally felt in the Profession might be supplied, without detriment to the Universities, and without material infringement of the rule, which ought to be upheld, that those who intend to be Physicians, should resort to the Universities for preliminary and general Education.

Such being the objects and principal enactments of the new Charter which has been prepared for the College, the salutary changes which it would effect are calculated, in the opinion of the College, to render it an Institution more generally acceptable to the Physicians of this Country, and more useful to the Profession and the Public.

Therefore, the College respectfully but earnestly requests the assistance of Government, in order that

a short Act of Parliament may be passed, enabling the Crown to grant this Charter, on the Petition of the College, and in order that the Crown may be advised to grant it.

FRANCIS HAWKINS, M.D., *Registrar.*

Medical Intelligence.

OPERATIONS PERFORMED UNDER THE INFLUENCE OF ÆTHER.

The announcement of a new means of performing surgical operations without pain has excited such general interest, and been already so extensively diffused throughout the country, that it is now merely necessary to bring forward, from time to time, such evidence of the efficacy of the new mode, as shall enable us to estimate its advantages, and to appreciate aright those circumstances under which it may hereafter be available, or otherwise, for effecting the end in view. The evidence on which the inhalation of æther, as a means of producing narcotism and insensibility to pain, was first introduced into this country, will be found detailed in the recent number of the *British and Foreign Medical Review*. From this it appears, that Dr. C. F. Jackson and Dr. Morton, of the United States, are the authors of the discovery. The following is an extract from a letter to Dr. Forbes, dated November 29th, from Dr. Ware, of Boston, a gentleman with whom many of the members of the Provincial Association had the gratification of becoming personally acquainted, at the Anniversary Meeting at Norwich.

Dr. Ware writes,—"I found on my arrival here, a new thing in the medical world, or rather, the new application of an old thing, of which I think you will like to hear:—It is a mode of rendering patients insensible to the pain of surgical operations, by the inhalation of the vapour of the strongest sulphuric æther. They are thrown into a state nearly resembling that of complete intoxication from ardent spirits, or of narcotism from opium. This state continues but a few minutes—five to ten—but during it the patient is insensible to pain. A thigh has been amputated, a breast extirpated, teeth drawn without the slightest suffering. The number of operations of various kinds, especially those in dentistry, has been very considerable, and I believe but few persons resist the influence of the agent.

"The effect is not exactly the same on all. In some the insensibility is entire, and the patient is aware of nothing which is going on; in others, a certain degree of the power of perception remains; the patient knows what the operator is doing, perceives him for example, take hold of a tooth and draw it out, feels the grating of the instrument, but still has no pain.

"There are no subsequent ill effects to detract from the value of this practice, none even so great as those which follow a common dose of opium. One person told me she had some unpleasant sensations in the head for a short time, and was weak, languid, and faintish through the day, but not more so than she ordinarily was from having a tooth drawn. Another told me that he experienced something of the same kind, and in addition, that his breath smelt very strongly of æther for forty-eight hours, and was indeed so strongly impregnated with it, as to affect the air of the room in which he sat, so as to be disagreeable to others."

The method has been used by Dr. Warren, of Boston, who up to the 24th of November, had applied it in six cases with satisfactory success, and no unpleasant sequel.

Dr. Bigelow thus describes the process followed:—"A small two-necked glass globe contains the prepared vapour, with sponges to enlarge the evaporating surface. One aperture admits the air to the interior of the globe, whence, charged with vapour, it is drawn through the second into the lungs. The inspired air thus passes through the bottle, but the expiration is diverted by a valve in the mouth-piece, and escaping into the apartment, is thus prevented from vitiating the medicated vapour."

He then mentions several cases of operations performed under the influence of the inhalation,—chiefly extraction of teeth and amputations.

The first operations of the kind performed in this country were by Mr. Liston, at University College Hospital. One of these was a case of amputation of the thigh, the other the partial removal of the nail in onychia. The method has since been had recourse to with success in the Richmond Hospital, Dublin, by Dr. J. MacDonell, in a case of amputation of the arm; at the Bristol General Hospital, by Mr. Lansdown, in a case of amputation of the thigh; at Wolverhampton, by Mr. G. Edwards, also a case of amputation of the thigh, reported in the present number of this Journal; at Addenbrooke's Hospital, Cambridge, by Mr. Humphry, in removal of the finger, &c.

The following is an extract from a letter from Mr. Humphry to Mr. Crosse, the President of the Provincial Association, dated January 2, 1847:—

"I have tried the inhalation of æther with perfect effect, the patient not having the slightest consciousness of pain whilst I quickly removed a finger and part of the metacarpal bone. It promises very great things, and seems to be attended with very little bad effect. The students have experimented on themselves, and were unconscious of pain from pricking, nipping, &c., whilst under the æthereal influence."

In the cases operated upon by Mr. Liston, the vapour was administered by an apparatus, consisting "of the bottom part of a Nooth's apparatus having a glass funnel filled with sponge, soaked in pure *washed* æther, in the upper orifice, and one of Read's flexible inhaling tubes in the lower." The æther falling through the funnel became vaporized, and the vapour descending to the bottom of the vessel, was thence inspired through the flexible tube.

The apparatus used at Bristol is described by Mr. Herapath as follows:—

"A common, but very large, bladder should be fitted with a collar to which an ivory mouth-piece with a large bore can be screwed. Without the intervention of any stopcock pour in about an ounce of good common æther, and blow up the bladder with the mouth till it is nearly full; place the thumb on the mouth-piece, and agitate the bladder so as to saturate the air in it with the vapour. As soon as the patient is ready for the operation, close his nostrils, introduce the mouth-piece, and close the lips round it with the fingers. He must now breathe into and out of the bladder, and in about one or two minutes the muscles of his lips will lose their hold. This is the moment for the first cut to be made. In two or three minutes the effect will begin to disappear; the mouth-piece should be again introduced, and this repeated as often as required. If the pulse should indicate a sinking of the patient, a little wine will restore him. I have no doubt but the inspiration of nitrous oxide (laughing gas,) would have a similar effect upon the nerves of sensation as the vapour of æther, as I have noticed that persons under its influence are totally insensible to pain; but I do not think it would be advisable to use it in surgical cases, from its frequently producing an ungovernable disposition to muscular exertion, which would render the patient unsteady, and embarass the operator. "The administrator of the vapour will of course take great care that no fluid æther shall be allowed to be drawn into the lungs, otherwise suffocation would result, or at the best a violent cough, which must protract the operation, and considerably distress the patient."

NEW VEGETABLE ALKALI.

At a recent meeting of the Chemical Society, Mr. Porrett read a paper "On the existence of a new Vegetable Alkali in Gun-Cotton," to which he has given the name "Lignea." He obtained it by the solution of gun-cotton in nitric acid, heated to between 100° and 180° Fahrenheit. On dropping this solution into water a white precipitate formed, having all the characters of gun-cotton, without fibre. Bicarbonate of potash effectually neutralized the solution, giving rise to nitrate of potash, and a copious whitish-grey precipitate,—a carbonate, probably, of the new alkali. When hyponitrous acid was made to act on an aqueous solution of the alkali, a synthetical proof of its existence was obtained, by the reproduction of hyponitrite of the oxide of lignin (gun-cotton.) Mr. Porrett conceives that lignea may by formed by the decay of woody fibre, and may thus be found to exist as an acetate in the sap of vegetables. Its chemical composition would be one equivalent of lignin, two of oxygen.

MEDICAL APPOINTMENT.

Mr. Benjamin Phillips has been elected Surgeon to the Westminster Hospital, in the room of Mr. Anthony White, resigned; and Mr. Barnard Holt, Assistant Surgeon, in the room of Mr. Phillips. Mr. Anthony White has been appointed Consulting Surgeon to the Hospital.

ROYAL COLLEGE OF SURGEONS

Gentlemen admitted Members on Tuesday, Dec. 29, 1846:—E. Archer; W. L. Dudley; R. B. Roscow; J. White; W. Morgan; F. W. Richardson.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, Dec. 24th, 1846:—Joshua Lever, Bolton le Moors; Henry Turner Lane Rook, Barnstaple; Richard Budd Painter, Westminster; Robert Allen, Cartmel; Francis Sibery, Long Clawson; James Edmund Clutterbuck, Newark Park, Gloucestershire.

Thursday, December 31st, 1846:—Cornelius Black, Chesterfield; Charles Thompson, Leicester.

OBITUARY.

Died, November 26th, at Parma, aged 76, the celebrated Italian Professor Tommasini.

Dec. 14th, in Charles Street, Manchester Square, London, John Foley, Esq., M.D.

17th, aged 80, M. Broussonet, Professor of Clinical Medicine in the School of Montpellier.

23rd, in Dublin, aged 61, John Bickerson Flanagan Esq., late Surgeon of the 4th Dragoon Guards.

26th, at Lower Garthmyl, Montgomeryshire, aged 73, Edward Johnes, Esq., M.D.

Jan. 1st, at Hereford, F. B. Glaspole, Esq., M.D.

Lately, Peter Milner, Esq., Surgeon, of Mirfield, near Dewsbury, Yorkshire.

BOOKS RECEIVED.

A Treatise on the Plague: more especially on the Police Management of that Disease, &c.; with Hints on Quarantine. By A. White, M.D., Deputy Inspector-General of Military Hospitals, and late Superintendent of the Plague in Corfu, &c. London: Churchill. 1846. 8vo. pp. 342.

Practical Remarks on Near Sight, Aged Sight, and Impaired Vision, &c. By William White Cooper, F.R.C.S., Senior Surgeon to the North London Ophthalmic Institution, &c., &c. London: Churchill. 1847. Post. 8vo. pp. 216.

Report of Henry Austen, Esq., C.E., Honorary Secretary to the Health of Towns' Association, on the Sanatory Condition of the City of Worcester: with an Appendix, by Edwin Chadwick, Esq., Barrister-at-Law, and Secretary to the Board of Poor-Law Commissioners. Worcester: Eaton and Son. 1847. 8vo. pp. 46.

TO CORRESPONDENTS.

Communications have been received from Mr. Bartrum; Mr. J. W. West; Dr. Badeley; Mr. Addison; a Member of the Association; the Sexagenarian M.A.; Mr. Cotton; the Society of Apothecaries; the Sheffield Medical Society; Dr. Belcombe.

It is requested that all letters and communications be sent to Dr. Streeten, Foregate Street, Worcester. Parcels and books for review, may be addressed to the Editor of the Provincial Medical and Surgical Journal, care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL
MEDICAL & SURGICAL JOURNAL.

DESCRIPTION OF AN APPARATUS FOR INJURIES AND DISEASES OF JOINTS, WITH OBSERVATIONS AND CASES.

By Benjamin Barrow, Esq.,

Fellow of the Royal Medico-Chirurgical Society, and formerly Resident Surgeon at St. Bartholomew's Hospital, London.

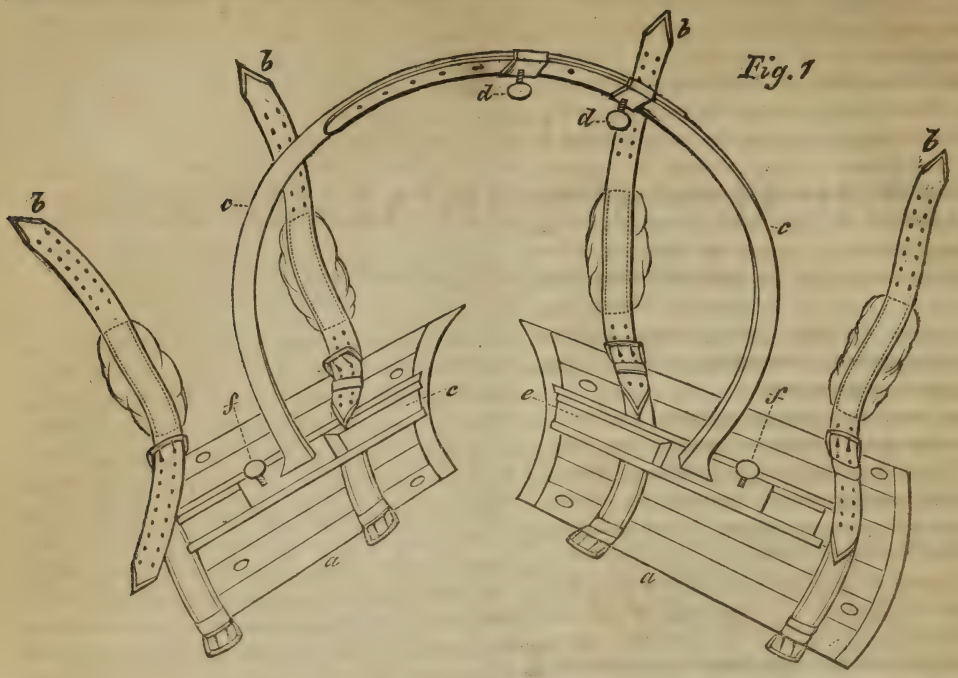
The following observations are submitted to the public in the hope that they contain some novelties, the knowledge of which will be found useful in the management of diseased and injured joints.

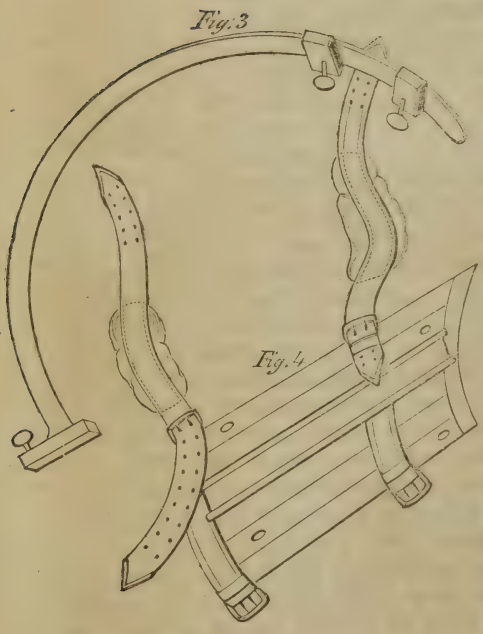
An almost constant attendance for ten years at St. Bartholemew's and other large Metropolitan and Continental Hospitals, and some years of private practice, have afforded me in the first place, many opportunities for comparing the various modes employed in the treatment both local and general of injuries and diseases of joints; secondly, the results arising from these various plans; and lastly, how the means and apparatus in general use might be improved and deficiencies supplied. I must premise that it is not my intention to enter more minutely into the history of these cases, either as regards the course they run, or the treatment ordinarily employed, than may be necessary for the clear explanation of the apparatus which I am desirous of introducing to general use; for the valuable treatise upon the subject of the diseases to which joints are liable by Sir Benjamin Brodie, precludes the necessity, I might say the possibility, of any subsequent writer, however great his experience, adding to it any important information.

The prominent position which the joints, especially the elbow and knee, hold in the human frame, augments considerably their liability to receive more frequently than other parts of the body external injuries; no parts are so prone to inflame as the joints; in no part wherein inflammation has once set up, does it increase so rapidly as in the synovial membrane, which renders it so much the more important that all motion in a joint should be immediately restrained and altogether prevented after the first appearance, however slight, of inflammation, at the same time that all necessary local remedies are efficiently applied. To obtain this end has been my object, and to explain the requisites for carrying out the above measures, and at the same time to direct more attention than it appears to me has hitherto been done, *to the quiet treatment* which diseases and injuries of the joints in every stage require.

I believe it will be found that by the aid of the splint,* represented in the cut, *Fig.* 1, the objects just named may be efficiently carried out, as also the views and directions of Sir Benjamin Brodie most fully complied with. These views and directions I cannot do better than give in his own words,—he says, "Not only in cases of inflammation of the synovial membrane, but in all other cases in which actual disease of a joint exists, the disease, whatever it may be, is kept up and aggravated by motion and exercise, and whatever means can be employed so as to keep the joint in a state of complete repose will go far towards the production of a cure. In the early stage of acute inflammation of the synovial membrane, indeed no interference on the part of the surgeon is necessary for this purpose, the pain which the patient experiences, in every attempt made to use the limb being sufficient to prevent him using it. But it is otherwise when the inflammation has in a great degree subsided. At this period the motion of the joint occasions little or no inconvenience at the time, although it invariably tends to aggravate the symptoms afterwards. It is difficult to persuade a patient thus situated to submit to a very rigid system of confinement, and if he should do so, there is always danger in protracted cases that his general health may suffer in consequence. It is important that he should not be altogether deprived of the opportunity of taking air and exercise; yet it is necessary that the affected joint should be kept in a state approaching as near as possible to one of complete repose. This double object may be attained by means of a proper bandage applied so as to restrain the motions of the joint, at the same time that it makes no more than a moderate degree of pressure on it. As to the best mode of carrying this plan into execution, the surgeon must exercise his own judgment in each individual case. If the disease be far advanced, and there is danger of the cartilages

* The Society of Arts of London awarded the silver medal for the year 1841, for this apparatus.





being ulcerated, he will find it prudent to restrain the motions of the joint altogether."

Upon these observations I must venture to make one or two comments. The first I would offer is, that there has always appeared to me to exist, even from the commencement of inflammation in the synovial membrane, the *greatest* necessity for keeping the affected joint *perfectly at rest;* for although pain however severe, be present in the first stages of the attack, and to such a degree, as in a great measure to prevent all voluntary motion, still we must all be sufficiently conscious of the many involuntary movements as it were, to which our limbs are subject, whether waking or sleeping, not to trust altogether to this pain as a restriction from motion,—motion which must more or less aggravate and increase the irritation already existing in the joint.

The great difficulty of restraining motion in, and avoiding pressure upon, the joint, at the same time that the full and complete application of all remedies necessary for the prevention of inflammation and alleviation of pain is carried on, has been, I am well aware, most frequently the cause of this part of the treatment being neglected; but I am in hopes that the apparatus represented by *Fig.* 1, will be found calculated to overcome, on future occasions, every similar obstacle.

Description of Cuts.

FIG. I.—(*a a*)—The wooden splints divided. *b b b b* the straps and buckles.

(*c c*)—The arc or bow. *d d*, the screws which bind together the two portions of the arc or bow. *e e*, the grooves in which the arc or bow moves, allowing the splints to be brought nearer to, or removed farther from, one another. *f f*, the screws which confine the portions of arc or bow in the grooves *e e*.

FIG. II.—Represents the screws or stops which allow of the two portions forming the arc or bow to move to a certain extent one upon the other.

FIG. III.—Represents one portion of the arc or bow removed from its groove.

FIG. IV.—Represents the wooden splint, with its straps and buckles attached.

That air and exercise are highly necessary, especially for those persons who are so frequently the subject of diseased joints, (viz., the scrofulous,) no one will deny. This end can, by means of the splint in question, be most fully attained, during the whole progress of cure of any disease or injury, allowing the requisite remedies to be at the same time continued, no pressure being applied to the joint itself,—a most prejudicial practice, particularly as regards the knee-joint, where the patella pressing upon the articular surfaces of the femur and tibia must, by the consequent friction, very much increase the injury already inflicted upon the joint by the previous inflammation, at the same time that it keeps up the irritation.

I may here remark that the apparatus I am about to describe has been invented some length of time, but I have delayed presenting it to my professional brethren until I had tested its utility in all those cases for which I considered it peculiarly adapted. It will be well also to observe, that the arc or bow, (*c.c., Fig.* 1,) which presents an awkward appearance, but with which I cannot discover the possibility of dispensing without very much impairing the value of the apparatus, may be unsightly, but still not inconvenient nor unnecessary, affording as it does complete protection to the joint, whether the patient be in bed, or up and about. A blow upon it when the splint is applied to the arm conveys no shock to the joint, the whole limb moving together from the shoulder. The same applies to the knee, when the splints are placed, one above, the other below, the joint. It will be observed, that the two splints (*a a, Fig.* 1,) are split, to allow of their close adaptation to the limb; they must be padded, and then firmly fixed, by means of the straps and buckles, *b b, b b,* (or by what would be much better, a piece of elastic webbing, extending the whole length of either splint, and laced at the side, for the narrow straps are very apt to act as ligatures, and to cause much pain and uneasiness from their unequal pressure,) one to the upper, the other to the forearm; or the one to the thigh, the other to the leg, as the case may be. The two splints are connected by the steel arc or bow *c c*, which is formed of two pieces, sliding one upon the other, in order to allow of the limb being brought to any angle, or placed straight, as occasion may require. This being accomplished, they are fixed by means of the screws, *d d.* Thus the two divisions of the limb are as it were connected, and consequently the joint kept perfectly at rest; at the same time being, as I have before stated, quite free for the application of all necessary remedies. It will be farther noticed that the two steel portions forming the arc or bow move in the brass grooves *e e*, in order to allow of the splints being moved nearer to or farther from the joint, as circumstances may arise; the bow being again firmly fixed in the grooves by the binding screws *f f.* The holes observable on one of the steel portions are to admit the small screws or stops represented by *Fig.* 2, and which allow of our giving to the joint moderate and gradual motion and extension; the binding screws *d d* being then removed, a strap may be fastened to any of the brass buttons *o o o o o o*, fixed to the splints; and this being carried round the neck and shoulders answers the purpose of a sling.

Fig.2

In addition to the cases to which I have alluded as likely to be benefitted by the use of this splint, I may add that it is extremely serviceable in cases of fracture of the patella, fully answering the purpose of all bandages hitherto employed, and which more or less interfere with the application of remedies, and with the joint itself. The two splints *a a* being brought as near as required, one to the upper, the other to the lower, end of the fractured portions, pressure as much as may be necessary to keep them in apposition and close connection can be most effectually accomplished, and kept up as long as there is that disposition to separate, which so frequently takes place as a consequence of the strong action of the muscles attached to, and surrounding the upper portion of the patella.

In like manner may the splint be most advantageously applied in cases of fracture of the olecranon, especially when the triceps muscle is strong, and we find the fractured portion drawn upwards some distance from the ulna. No accident is so likely to produce mischievous consequences to the joint, and interfere with its after utility, as fracture of the ulna, unless properly attended to in the first instance.

Contraction which so often follows inflammation of the joints, may be completely prevented by applying the splint in the early stages of the attack; and even should contraction have taken place, it may be overcome by means of the splint, the angle being changed *gradatim*, the joint being at the same time fomented and rubbed as may be desired. The great difficulty in the first place in preventing these contractions, and in the second, in overcoming them, has hitherto been the want of some apparatus which would leave the joint perfectly free, patients being unable to endure the pain consequent upon *constant* pressure. I, in common with every one, under whose care even a single case of contraction of the elbow or knee-joint has fallen, have had many occasions of observing, that unless the action be *constantly* persevered in, the limb, in a very short space of time, regains its previously-contracted position.

The splint will be found a useful adjunct to the means already employed in the treatment of those cases in which the tendons of the hamstring muscles are divided, on account of contraction or partial anchylosis of the knee-joint.

I have no doubt but that this apparatus will likewise afford most important aid in those cases in which the extirpation of the articular ends of the bones may be necessary; not only will it be found useful in main-

taining the limb at the required angle, and keeping it perfectly at rest after the operation, but it may be applied before the operation, supplying the place of an assistant, holding the two divisions of the limb much more steadily than can be done by the firmest hand, and not at all interfering with the surgeon's manipulations, the joint being free in its entire circumference.*

By slight modifications in the shape and size of the splints, and length of the straps, any joint in the body may, by means of this apparatus, be kept perfectly at rest, and guarded from external violence.

It is well here to add, that the splints require most careful padding and adjustment, for at some angles it will be found that either the upper one will be raised and the lower one depressed, or *vice versâ*. In such cases, unless the padding be good, inconvenience will be experienced by the patient, undue pressure being made on the soft parts.

Thus have I endeavoured to explain an apparatus most simple in its mode of action, easily managed, and made at a very moderate cost.†

I have selected from many others the following cases, in which I have employed my joint apparatus with the greatest advantage, and which I here recite without any comments as to the general and local treatment specifically used, and which were of course regulated in the various cases, according to their requirements:—

Case I.

A boy, aged ten years and a half, came under my notice, being afflicted with that condition of the right knee-joint, so common in scrofulous children. He had suffered more or less from this affection for several years; abscesses had formed, broken, and healed, from time to time; the leg became bent at right angles to the thigh, and thus the lad was almost incapacitated from moving about, except by hopping upon one leg, with the aid of a crutch. The least pressure upon the patella caused him so much pain, and increased the swelling so considerably, besides inducing inflammation, that any plan for gradually extending the leg, which in any way interfered with the joint itself, was obliged to be abandoned.

I recommended the use of my splint, which was accordingly employed for a lengthened period, at the same time that fomentations and soothing applications were constantly used around the joint. The angle of the splint was changed at first about twice a week, and then every other day, until the position of the limb was so much improved that the boy could walk tolerably well, at the end of three months, without the aid of crutch or stick.

The boy sometimes during the progress of this cure complained of so much pain that it was found necessary to remove the apparatus. In twenty-four hours the limb would have almost regained its right-angular position. To obviate as much as possible this inconvenience, and consequent retarding of the cure, whenever my splint was removed, I directed the foot to be tied to a foot-board, and a straight splint to be placed against the patient's heel and thigh. This plan had the desired effect of preventing the frequent retraction.

Case II

Occurred in a boy of about seven years, who was afflicted with a diseased elbow, bearing in every respect a strong resemblance to the knee-joint just described. The left arm was almost disabled; the swelling about the joint was very considerable; the bones were distinctly felt to grate one upon the other, shewing that the normal condition of their articulating surfaces was destroyed. Quietude, and a due application of proper local remedies, were the only chances of saving the limb. The *rest* was most effectually preserved by means of my joint-splint, and which allowed at the same time of as complete an application of remedies as could be desired. In this case the apparatus was kept applied for nearly five months, which perseverance was followed by the gratifying result of a fairly useful arm.

Case III.

A young man, of twenty-four years of age, whilst walking, slipped and fell, striking his elbow violently against the curb-stone. When I first saw him, about two hours after the accident, the limb around the elbow-joint was enormously swollen and bruised, so much so as to preclude the possibility of ascertaining whether there was fracture or not of either of the bones. I immediately fixed upon the arm my joint-splint, applied cold lotions, and on the following morning, about thirty hours from the time of the accident, the swelling had much subsided, and I detected a crepitus, proving that the olecranon was fractured. I put the arm in that position best adapted for such an accident, and then replaced the splint at the required angle. The lotions, &c., were continued, and every thing went on most prosperously, indeed there was not one drawback; the union of the bone was perfect in about three weeks; the motions of the arm were not at all impaired. The *perfect quiet*, and the constant application of the necessary remedies from the first, without any pressure upon the joint itself, may in a great measure account for the rapid decrease in the swelling, for the absence of all after inflammation or inconvenience, as also, for the speedy and perfect union of the fractured bone.

Case IV.

A little girl, aged eight years, was brought to me on account of a contraction at the bend of the elbow, following a burn. I learnt that the accident had occurred some five years previously from her wearing-apparel catching fire; that during the time the wound was healing the arm became bent; that the cicatrix had been divided twice, and that on the last occasion a

* A much larger bow than is necessary in most cases might be attached to the splints during the performance of the operation.

† Mr. Ferguson, surgical instrument maker to St. Bartholomew's Hospital, has always manufactured my splints, &c. I would advise all who employ this apparatus, to have the bows made of steel and not brass, for the latter material adds much to the weight of the splints.

portion of the hardened skin had been removed; that considerable difficulty had been after each operation experienced in keeping the arm extended, during the progress of the healing of the wound, caused by the division of the cicatrix, and that a common straight splint had been fixed upon the back of the arm, but from the pain and uneasiness consequent upon its constant pressure, it was found necessary to remove it very frequently, and at last to abandon its use altogether. I placed upon the arm my apparatus, and with a scalpel, just slightly divided the cicatrix upon the first day, placing the arm at the angle which this division allowed, without causing pain, and there fixed it by means of the joint-splint. Two days subsequently I again saw the child and effected another division of the cicatrix, about an inch from the first, again altering the angle of the arm, and at the same time that of the splint.

This operation I repeated at five different periods at about three days' interval, and at each time placed the arm and splint at the angle which I found compatible with the child's comfort; the arm had become perfectly straight in about six weeks; the splint was, however, still retained upon the limb, the straight position being occasionally changed for an angle more or less acute as the fancy took me, thus avoiding the chance of tiring my patient. During this latter period I ordered friction and fomentations, whereby I succeeded in softening very much the cicatrized skin. The arm in about three months had almost regained its natural appearance, and its usefulness is as great as that of its fellow

CASE V.

A man, thirty-six years of age, had the misfortune to fall and fracture his patella; he did not apply for surgical aid until some hours after the occurrence of the injury, imagining that he had only bruised his knee. Finding, however, that it became much swollen and very painful, he thought it advisable to seek relief, and upon examination I readily discovered that the above-named accident had occurred. I applied my apparatus, the upper edge of the lower splint pressing against the inferior portion of the patella, and the lower edge of the upper splint against the superior porion of the fractured bone. The two portions had become widely separated in consequence of the attempts made to walk and move after the fall, but this space was day by day much decreased by the gradual movement of the wooden splints nearer to each other, and which of course at the same time approximated the fractured surfaces of the patella. Leeches, poultices, and fomentations were during this period and until the limb was restored to use, frequently and satisfactorily applied; whilst the joint and fractured bone were kept perfectly at rest and all muscular action overcome by the constant application of the joint-splint.

I may mention that the limb was elevated in this case, as is usual in such accidents, at the same time that the splint was employed. These two measures combined, caused the patient no inconvenience, but on the contrary were a source of much comfort, and decidedly tended to the rapid and solid union of the fractured patella.

THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(*Fourth Series of Experimental Researches.*)

By WILLIAM ADDISON, M.D., F.R.S., Malvern.

I. VEGETABLE TEXTURES.

The science of morphology, which treats of the gradual transformation of the primary elements of vegetable structures into the various special organs of the species, has long formed an interesting and essential department of physiological botany. The plan upon which the metamorphosis takes place, "is"—according to Dr. LINDLEY—"notwithstanding the infinite variety observable, extremely simple, and executed by modifications of the leafy texture."

If the structure of a leaf of flowering plants be carefully examined in very thin sections, with a sufficiently high magnifying power, (750 diameters linear,) it will be found composed of *two distinct cellular elements*, a fibrous tissue, spiral vessels, stomata, and an immense assemblage of air-vesicles, or air-bubbles. On the upper surface of the leaf, is a thin transparent homogeneous membrane, divided into a number of cellular compartments irregular in form and outline, and variable in size in different species of plants. On the under surface is a similar membrane, in which the cellular compartments are thickly interspersed with the stomata. The cellular compartments and irregular outlines thus visible on the under and upper surfaces of the leaf, are the exterior outer portion of a very fine and strongly coherent cellular texture, running through the entire thickness of the leaf, and so disposed as to form numerous divaricating air-passages connected with the stomata.* Within the meshes of this coherent cellular texture, around the walls of the divaricating intercellular air-passages, and in close apposition with the air contained within them, is a less coherent cellular element or texture, consisting of smaller and but slightly adherent corpuscles or cells filled with the green granules of the *chlorophylle*, each granule consisting of a number of minute molecules.

The term cellular tissue or texture has been indiscriminately applied to so many portions of vegetable structure, that it is necessary to state prominently the point which a careful microscopical examination of a leaf appears to me to establish between the coherent cellular textures, the cuticle and supporting framework, and the incoherent cellular texture forming the parenchyma.

If a thin section be taken from the main rib, or any of the other ribs of a leaf, the cellular texture disclosed has the following properties and appearance. It is strong and coherent; the spaces of the cells are

* These air-passages when a section of the parenchyma has been made, display *oval foramina*, similar to those seen in a section of a lung.

nearly or quite free from chlorophylle granules, and the cell-walls are comparatively thick, the structural material not occupying the central parts of the cells, but being collected at the cell-walls and apparently outside and between them.

If having previously sliced away the outer integument of the leaf, a thin section be taken of the green parenchyma, the cellular element displayed has a very different appearance. It consists of smaller distinct cells arranged around oval or rounded vacant spaces, and if the succulent leaf of *Sedum acre* be crushed between two slips of glass, the incoherent cellular elements are found scattered and dispersed upon them.

It is well known that two important functions are performed by leaves—respiration and secretion; and it appears from my examinations that in the leaves of *phanerogamia*, each function has its appropriate anatomical structure—the coherent cellular textures ministering to the form of the leaf, and to respiration; the incoherent cellular texture, to secretion or nutrition. That the interior of a leaf is full of air, may be demonstrated by a microscopical examination of the parenchyma; and that the air is situated in numerous air-passages, is also equally evident, at the same time. That this air may be forced out by heat, is readily shewn by immersing a leaf in boiling water, when the under surface becomes thickly coated with minute air-bubbles, which appear to escape by the stomata; for the upper surface of the leaf, if uninjured, never allows of the escape of similar bubbles. When, therefore, the broad upper surface of a leaf is exposed to the noon-day sun, the air occupying the air-passages must expand; and if all the passages be filled with air, some portions of it, altered doubtless by the respiring functions of the incoherent cellular texture, must escape, either through the stomata, in which the air-passages terminate, or by other means. But when the sun's rays are obscured by passing clouds, and at night, the air within the leaf, becoming colder, will contract in bulk, and there will be space for fresh portions of the outward air to enter. Heat or caloric, therefore, is the *efficient cause*; and change of temperature—sun and cloud—day and night—the *conditions* of respiration in the leaf; *inspiration* taking place during the passage of clouds, and at night; *expiration* going on when the sun shines upon the leaf.

In most of the herbaceous plants, the green matter of the lower leaves visibly disappears during the inflorescence and the growth of the seed, that is to say they wither and dry up. This is remarkably the case in the *sedums*, *lilies*, &c., and the fact is observable in all tender plants, should there be any lack of moisture at the important time of flowering. The following, among many other examples, may be related in illustration:—If a plant of the garden nasturtium (*Tropæolum majus*,) be pulled up whilst in vigorous growth in the autumn, and thrown upon the ground in the sun, it will continue flowering for a month or six weeks, putting forth new shoots, new flowers, leaves and seeds; but during all this time the older leaves are gradually, from below upwards, one after another, exhausted of their green matter, withering and shrivelling up. From these and many other facts well known to botanists, but which it is unnecessary to particularize, it is concluded that the green matter contained in the cells of the incoherent cellular texture of the leaf is of the nature of a secretion elaborated within the cells, giving sensible properties or qualities to the leaf, and essential to the growth of the subsequent parts of the structure, the flower, the seed, or the bud; while the coherent cellular texture gives form and stability to the leaf, and administers to the function of respiration.

The distinction between the coherent and incoherent cellular textures clearly exists in nature; the former may be seen in the wood and pith; the latter in the bark and leaves. These two textures may be oftentimes conjoined, and run by transitional stages into each other; still they are as frequently disassociated, and when they are so, they are as distinct in appearance and mechanical properties as they seem to be in function.*

The general nature of the parenchymatous part of leaves, which I have termed the incoherent cellular texture, has been well explained by Link and others, and was figured by Mohl, in 1828; but the most complete account is that of M. Adolphe Brongnart, in 1830, of which the following is an abstract:—

The cuticle is a layer of cellules, adhering firmly to each other, and sometimes but slightly to the subjacent tissue, from which they are entirely different in form and nature—in form, for the cellules are depressed, and in consequence of the variety of outline they present, form meshes, either regular or irregular; and in nature, because these cellules are perfectly transparent and colourless, and probably filled with air. They scarcely ever contain any organic particles, and are probably but little permeable, either to fluids or gaseous matter; while on the other hand, the cellules of the subjacent *parenchyma* are filled with the green substance that determines the colour of the leaf. Beneath the upper cuticle are two or three layers of oblong cells, generally of much less diameter than the cells of the cuticle, and therefore easily seen through it; the cells have little intervals or spaces between them, and in leaves that have stomata on their upper surface, there are among the cells some large spaces through which the stomata communicate with the interior of the leaf. On the under surface of the leaf, the cells of the parenchyma are irregular, often having two or three branches which unite with the

* Cellular tissue is found in three essentially different states, *membranous*, *fibrous*, and *parenchymatous*;—membrane and fibres combined form a fibro-cellular, and parenchyma and fibres form a fibro-corpuscular texture.

limbs of the cells next them, and so form spaces which are larger than the cells themselves, and either correspond directly with the stomata, or are in communication with them.*

(For examples of the incoherent cellular parenchyma of a leaf, and of the coherent cellular structure of the cuticle and ribs, I refer the reader to Dr. Lindley's "Introduction to Botany," plate 1, fig 2, 3, 6, and 7; plate 3, fig 5, ed., 1832.)

Mr. Edwin Lees, who is well known as an indefatigable and practical botanist, has permitted me to state his opinion upon the structure of a leaf.

"I have perused Dr. Addison's account of the vegetable tissue, and seen his demonstrations with the microscope repeatedly. It appears to me that the distinction of coherent and incoherent cellular structure, is not only correct in fact, but of considerable importance in a physiological point of view. It is clear that the coherent cellular structure forms the supporting frame-work of the leaf; and that it abounds with air is satisfactorily proved by Dr. Addison's experiment of immersing a leaf in boiling water, when the under surface gives exit to numerous air-vesicles. It therefore appears correct to attribute to this structure an important function in respiration; and it appears equally correct to suppose that the system of nutrition and secretion goes on in the cells containing the granules of chlorophylle, which are frequently found but very slightly coherent. The coherent and incoherent structures are not easily demonstrated perhaps as distinct structures in every leaf, but I believe they exist. Though well aware with other botanists that leaves carried on the operations of respiration and secretion, yet the different functions attributed to the two kinds of cellular tissue have never previously, I believe, been insisted on. The fact necessarily leads to inductions before undeveloped."—Edwin Lees, F.L.S., *Fellow of the Botanical Societies of London and Edinburgh.*

If the structure of a petal be examined in the same way with a microscope, we find a coherent cellular structure, abounding with air, to which indeed the whiteness and opacity of a white petal is wholly due. This coherent cellular texture has various forms, and the transparent homogeneous cell-walls are frequently marked with delicate *striæ*. The cells usually contain either a coloured fluid, or numerous coloured granules and molecules; and it is evident if the structural elements of a petal are formed by a process of metamorphosis from the leafy texture, that it is the green granular chlorophylle of the cellular parenchyma that has experienced the greatest amount of change;—in other words, whereas the colour of the leaf is green, and the colour of the petal blue, scarlet, or yellow, so therefore, if the structural elements of the petal are metamorphosed out of the leafy texture, it must be the incoherent cells containing the green matter,—the secreted and proper juices of the leaf, that have experienced the greatest amount of change. If we extend the microscopical examination to lower forms of vegetation, we find the fibrous or woody textures, and spiral vessels to disappear, the leaves of mosses and the fronds of ferns consisting wholly of cells, filled with a green matter, and rendered coherent by a thickening of their walls. Still lower, we find in the *conferfæ* elongated cells, joined end to end, each cell containing green granules of chlorophylle. Lastly, there are vegetable textures, consisting of cells filled with green matter, and of so slight a coherency, that the merest touch is sufficient to separate them from each other.

The order of vegetable structure then appears to be:—

1. Forms consisting of *incoherent cellular texture*; masses of cells or corpuscles with an interior (generally green) matter. These are the lowest forms—*algæ and lichens*, in which every cell or corpuscle is both a respiring and a secreting structure.

2. Forms consisting of *coherent cellular texture*; cells with an interior (generally green) matter, cohering either end to end as in the *confervæ*; or on all sides as in *fungi*, *mosses*, and *ferns*. Here again every cell is both a respiring and a secreting structure.

3. Forms consisting of a *compound cellular texture*, in which two distinct cellular elements with distinct functions are conjoined and co-exist; the coherent cellular element connected with the stomata and air-passages ministering to respiration, and the incoherent with the green granules of the chlorophylle within them executing the function of secretion. And it would appear that in the leaves of *phanerogamia*, there is a large quantity of air stored up in the air-passages, formed by the coherent cellular texture for the uses of the incoherent cellular texture. As we ascend in the scale of life and being, so we find more and more clearly special organs or textures appointed to special functions; let me therefore recapitulate the points I wish to urge upon the reader's attention. In the lowest forms of vegetable structure, the functions of secretion, growth and respiration, are conjoined in each cell or corpuscle, and these cells in many cases cohere so slightly, that the texture falls to pieces on being touched or handled. In some instances the structure is no more than a light cellular powder, and in others mucoid or soft. But in the leaves of phanerogamia, there is a coherent texture supporting the stomata and administering to the respiratory function; and also a less coherent texture executing the function of secretion.

I am sensible that the terms incoherent and coherent, as applied to the leaf, do but partially and inaccurately express the distinctions insisted on between the

* See, for a more detailed account of the structure of leaves, "Lindley's Introduction to Botany," particularly p. 85, ed., 1832.

secreting, the soft and brittle, cellular textures, and the non-secreting, coherent, and elastic ones; between the green cellular parenchyma, and the outer cellular membrane of the leaf. The distinctions are, however, very palpable, and in animal structures so important, that I purpose, in order to avoid confusion of terms, and yet preserve the distinctions set before us by nature, to use the term *corpuscular texture* for the *very* soft, opaque, and friable cellular textures, limiting the term *cellular* to those which are coherent, transparent, and elastic. For example, the liver and intestinal villi, I would say, are *corpuscular* textures; the lung a *cellular* texture;—the two former being opaque, friable, and incoherent; the latter transparent, elastic, and coherent; and if so, then there is *prima facie* evidence of an analogy between the blood of animals and the parenchymatous texture of a leaf.

REMARKS ON FEVER.

By William Davies, M.D., Physician to the Bath United Hospital.

(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association.)

The few remarks which I am about to submit to this meeting have reference to a disease which has, perhaps, given rise to more discussion in the medical world than any other, and concerning which there still remain various and conflicting opinions,—this is fever; and in what is to follow, I would be understood as referring to the common or idiopathic continued fever of this country, the general features of which every medical man is familiar with, more especially those who have past any part of their professional career in Edinburgh or Dublin.

My remarks shall be first on the nature of continued fever; and secondly, on the pathology of head-complication, as illustrative of what has preceded, and with reference to practice.

The two following propositions must be granted:—First, that the disease is communicable—or that an individual subjected to a sufficiently close intercourse with another labouring under continued fever, may become similarly affected.

Second. That in order to a disease being communicable, it is essential that certain matter shall pass off from the body of the individual affected, and be received into that of him who is to suffer. It is unimportant whether this entrance is effected by inoculation, or by means of atmospheric transmission; at present we have to do with the latter.

Now, if an individual were much confined to an apartment in which there were patients labouring under continued fever, breathing air loaded with the exhalations from such patients,—and if, after a time, the individual thus circumstanced were to be seized with the same disease, and others following after him subjected to the same influences, and sharing the same fate, with sufficient frequency and certainty to justify the conclusion that the one was the cause of the other,—and we were asked by what means or through what channel the system of the one became affected by the exhalations from the body of the other, we should, I think, have little hesitation in answering, that the matter exhaled from the bodies of the fever-patients entered the lungs of the healthy persons, along with the atmospheric air, and thus found entrance into the blood, where it accumulated until its amount was sufficient to impede the healthy functions of the body—that is, until fever was produced.

Again, if we were farther informed, that twenty previously healthy persons, from different localities, were similarly subjected to the influences above-mentioned, and that every one of these twenty persons was attacked by the disease, but that none of them were so until after an exposure of one or more weeks, some of them after a lapse of three months, and no two of them at precisely the same interval of time,—this would add confidence to our opinion, and we would say that the interval which elapsed between the first exposure and the seizure, marked the period during which the poison was accumulating in the blood, and that the difference, as regards length of interval, between exposure and attack, was an index as to the vigour or weakness of the different constitutions.

Our informant does not stop here, but tells us, that during the early period of the attack, and whilst it is at its height, the power to infect is not nearly so great as during the decline of the disease, and the advance towards convalescence. Here is another element in our belief, and we say, that whilst the disease is declining, and the patient recovering, the system is engaged in freeing itself of the poisonous matter, which is being evolved at the various emunctories of the body.

Now, these are not speculations, but carefully ascertained facts, and lead, I think, very conclusively to the belief, that in continued fever, the blood is primarily affected. I will not enter into the question, whether the constitution of the blood itself is changed by the action of the poison of fever, or, whether the blood merely serves as a vehicle for the conveyance of that poison in a free state to the various organs. This is a question unimportant as regards my present object; and moreover, we do not possess materials sufficient for its elucidation.

I will now proceed to a few practical deductions from, and illustrations of, the foregoing remarks.

Every practitioner who has seen much of continued fever in this country, is aware that the great danger he has to apprehend is the supervention of cerebral symptoms; here the intestinal follicular lesion is comparatively rare, and thoracic complication seldom

formidable;—the rock a-head he dreads is cerebral symptoms. Now, what I wish particularly to call attention to, is the fact, that when such symptoms do arise in the course of continued fever, they depend on a pathological cause, altogether distinct from that which is competent for the production of similar symptoms, when no fever exists—namely inflammation; and hence the remedies of inflammation are not always to be had recourse to, and never to the extent that would be advisable in primary encephalitis. The real cause of the head-symptoms would seem to be the effect which the poisoned or altered blood circulating in the brain produces on the functions of that organ; and strong evidence of the truth of this is to be found—first, in the progress of the disease, and secondly, in its morbid anatomy.

1st. In the progress of the disease, we find that the head-symptoms, during the early period of the attack, are confined to frontal headache and giddiness, with more or less of intolerance of light and sound; and as the disease advances, these conditions pass into great restlessness and sleeplessness, with active delirium, or it may be great torpor and drowsiness, with a wandering and confused state of mind when roused; and either of these forms may pass gradually into coma and death, or under more fortunate circumstances, into convalescence and recovery. All this would seem to mark the increasing influence of the poison on the blood, and through the blood, on the cerebral functions; and when this influence terminates short of death, we have another law of the action of poisons brought into play—namely, that after a time they lose their power over that particular system, and are discharged therefrom, leaving the individual in a fair way of recovery. Hence the wisdom of Cullen's statement,—that the proper object of treatment is "to obviate the tendency to death," well knowing that if the patient can be kept alive, and free from serious local lesion, for a sufficient time, the system will shake off the load of poison by which it is oppressed.

2nd. In the morbid anatomy of the brain in fatal cases of fever, from which ample proof has been obtained that there is no necessary connection whatever between the symptoms presented during life, and the morbid appearances discovered after death. I have examined the head in several cases, and one since I have been physician to the United Hospital, in this town, when death has taken place by way of coma supervening on the continued fever, without being able to discover any cerebral lesion at all proportionate to the symptoms, not anything more decided than slight sub-arachnoid effusion and perhaps, a drachm of fluid in the lateral ventricles. Dr. Alison, M. Andral, and Dr. Graves, have placed on record abundant evidence of the inability of morbid anatomy, to explain the cause of head-symptoms in continued fever. The following case in point is from Dr. Graves's "Clinical Medicine":—He says, "He was a young man of robust habit and apparently good constitution, and laboured under the ordinary form of maculated typhus. Shortly after his admission he was attacked with delirium, which was soon after followed by coma and death. Now, suppose you were called to see a patient, not labouring under typhus, but exhibiting a similar train of symptoms,—that is to say, violent delirium, accompanied by flushing of the face, suffusion of the eyes, headache, and a tendency to get out of bed,—in fact, a state of furious excitement, requiring the restraint of the strait waistcoat, what idea would you be likely to form of the condition of the brain? If a patient of this kind had no typhoid symptoms, you would certainly say that he was labouring under meningitis or cerebritis; and if the case proves fatal, you would naturally expect to find lesions of the brain fully sufficient to account for all his symptoms. And you would in all probability find extensive thickening of the membranes of the brain, with sub-arachnoid effusion, or you would discover softening, increased vascularity, and suppuration of the encephalic mass. But here, a man in fever exhibits all the symptoms of cerebral inflammation; the cerebral affection runs on to a fatal termination with great rapidity; he dies comatose. And what do we find on dissection? Doubtful signs of congestion, and no distinct evidence of inflammation; a slight opacity of the arachnoid at the base of the brain, and about a tea-spoonful of clear sub-arachnoid effusion." He then says, "This seems to prove that in the production of cerebral symptoms in typhus, some cause not to be recognised by the production of cerebral lesions, or in other words, something besides mere congestion or inflammation exists." And this brings us back to our starting point—namely, that this "something," which is neither inflammation nor congestion, is the effect of the poison of fever on the blood, rendering that fluid unfit for the support of the healthy functions of the brain.

It may be asked, why, in an attempt to fix on the blood as the starting point in fever, has no analysis of that fluid been submitted? The answer to this question is, simply, that no analysis has yet been made which has thrown any light on the matter, that is to say, the specific poison on which fever seems to depend has never been isolated. But this need not in the least surprise us, for there may be and doubtless are, many things in the blood which chemistry is unable to isolate,—urea for example. No chemist has yet succeeded in finding urea in healthy blood, yet if the function of the kidneys be arrested for a time, the presence of urea in the blood is easily demonstrated, showing that it does exist in healthy blood, although we are not able to find it. So again as regards sugar in the blood of diabetic patients. It was long before chemists succeeded in demonstrating the presence of sugar under such circumstances, and when this was done, it was by taking advantage of a well known

property of sugar—namely, fermentation. So that we are not at all justified in setting aside the evidence drawn from other sources, on the plea that organic chemistry has not succeeded in placing this poison before our eyes, for we must keep in mind, that whatever this poison may be, it is a matter with whose physical properties and chemical affinities we are wholly unacquainted, and that the only knowledge we possess concerning it, has been derived from a study of its effects on the living human body.

CASE OF PARTIAL AMPUTATION OF THE RIGHT FOOT.

By John Wickens West, L.A.C., M.R.C.S., &c.

Andrew Cobb, aged 25, by occupation a farmer, met with a severe accident to his right foot, August 20th, 1846. He had been engaged with his labourers at a thrashing machine, and his attention being suddenly attracted by one of his children approaching too near, he was put off his guard, and caught his foot in the machinery. It produced extensive laceration of the soft parts, and a comminuted fracture of all the phalanges of the toes excepting the little one, which was left entire. The metatarsal bones of the second and third toes were also fractured. The phalanges of the great and fourth toes were left in the machine, and those of the third merely hung by integuments. The bleeding at the time of the accident was considerable, but was timely arrested by a professional friend, who visited him in my absence.

On my arrival at his house about an hour afterwards, I found that the foot was merely bound up in a handkerchief, by the desire of the poor man, who was anxious for me to see him before an operation was performed. There had been no farther hæmorrhage, the artery, (popliteal,) being well secured by the tourniquet. On examination of the parts I found it quite impossible to save any of the toes, I therefore determined, in consultation with Dr. Crabb, to perform partial amputation of the foot; and as the soft parts beyond the toes were not much injured, I resolved to amputate as near to the seat of injury as possible, in order to retain for the poor fellow a useful limb. I commenced my incision on the dorsum of the foot, carrying it through the integuments in an oblique direction round the sole, thus securing a good flap. I then divided the tendons and other soft parts, and sawed through the centre of the metatarsal bones. The arteries were with some difficulty secured, especially the internal plantar; the outer being larger was more easily tied. The integuments were then brought in apposition, and retained by two ligatures, and the parts dressed with plaster and bandage. The man bore the operation remarkably well, and lost but little blood. Forty drops of the tincture of opium were given him shortly after, and I left him for the night.

21st. Visited him this morning, and found he had passed a restless night, and complained the bandage was too tight, and the stump painful. I slackened the bandage, and ordered cold water to be applied frequently. Pulse 96; tongue white.

Mist. Salinæ, oz. iss., quartis horis. Haust. Sennæ statim.

22nd. Has been more tranquil since yesterday, and got some sleep at intervals during the night. No hæmorrhage; bowels open; less feverish; pulse 90; tongue white.

23rd. Going on favourably, but the stump smells offensive, and is stiff and uncomfortable.

25th. At my visit this morning I removed the dressings, and found that partial adhesion had taken place; the stump discharged a thin fluid, but looked pretty healthy. I dressed the parts with soap-cerate plaster and bandage. Bowels open; pulse 96. To continue his medicine.

27th. On removing the bandage I found considerable discharge, very offensive and thick, and evident appearance of granulations. I ordered a bread poultice to be applied night and morning.

29th. The poultices have been continued since my last visit, and there is much improvement in the appearance of the parts, which are disposed to granulate freely. The ligatures are come away.

November 2nd. I omitted the poultices this morning, the parts looking so thoroughly healthy, and the granulations so exuberant, that I commenced applying caustic and dry lint, with straps of soap-plaster over.

3rd. The parts look healthy, and inclined to heal.

I continued the same treatment for three weeks, by which time the stump was completely healed, and the man was enabled, by the assistance of crutches, to get about.

December 12th. I visited him this morning and found he was able to put on an easy shoe, and could walk tolerably well with a stick.

I would remark, that I consider it far preferable, in all cases were it is possible, to amputate the foot at the centre of the metatarsal bones than to remove it at the articulation of those bones with the tarsal. The opening of joints, however small, is always attended by considerable irritation, and increases the sufferings of the patient.

Poole, December 26, 1846.

Hospital Reports.

WEST NORFOLK AND LYNN HOSPITAL.

COMPLICATED SURGICAL CASES AND OPERATIONS.

By Charles Cotton, M.D., F.R.C.S., &c.

(*Continued from page* 611, *of last Volume.*)

STRANGUATED HERNIA IN THE INGUINAL CANAL. (TWO DAYS.)

William Wicks, farm-labourer, aged 26, admitted at 10 p.m., October 27th, 1844. States that whilst unloading a cart of earth on the morning of the 25th a lump came down, which he was unable to return. He has been sick ever since, and the bowels have not acted. The surgeon who saw him having failed in the use of

the taxis, sent him to the Hospital, a distance of thirteen miles. There is a hard tense tumour, the size of an egg, in the left inguinal canal, scarcely protruding through the external ring; the testicle cannot be felt on the left side; the countenance anxious; pulse sharp and quick; frequent stercoraceous vomiting; complains much of pain in the belly and around the swelling. The taxis, warm bath, and bleeding proving ineffectual, and a tobacco enema, at the suggestion of Dr. Wayte, having been thrown up without avail, it was determined in consultation that an operation should at once be performed. The tumour was freely cut down upon throughout its whole length by Mr. Cotton, and its tendinous and fascial coverings divided, and the sac, dark and glistening, having the appearance of intestine, exposed; on opening which about two or three ounces of venous-looking blood burst forth from the wound. The strangulated contents proved to be chiefly omentum, much congested, and discoloured, with a knuckle of intestine situated high up at the internal ring, the seat of stricture. A blunt-pointed bistoury, carried flatly upon the finger, and afterwards turned upwards and outwards, relieved the stricture. The intestine was immediately returned, and the omentum readily followed. The edges of the wound were brought together by two sutures, and a compress was applied. The patient experienced immediate relief.

28th, 1 p.m. Pulse 78, soft and quiet; no pain nor sickness; bowels have not been moved. Haust. Magnes. Carb., Sodæ Muriatis, utrq. coch. minim. cum Syr. Papav., dr. ss. ex aqua statim.

9 p.m. Complains of a desire for stool; tongue clean; skin moist and warm; pulse 84; no peritoneal tension or tenderness. The injection of a castor oil, salt, and warm-water enema, in a few minutes brought away a large quantity of fæces and several scybala. To have panada diet, and a pill, with Opii, gr. ij., et Calom., gr. j., statim.

29th, 10 a.m. Passed a tolerable night, though occasionally griped; had a sparing feculent motion; there is a little pain and tenderness in the region of the wound, and the scrotum is œdematous and swollen; the pulse is quickened, 96. In every other respect he is quite comfortable. Let him have one-drachm doses of sulphate of magnesia in simple water every hour.

9 p.m. Bowels moved well three times; pulse 86, soft and compressible. Omitt. Magn. Sulph. Rept. Pil. Cal. et Opii.

30th, 10 a.m. Felt the wound uneasy during the night, and slept disturbedly, owing to frightful dreams. Is comfortable this morning. Bowels have not again acted; tongue covered with a creamy fur. Haust. Magn. Sulph., dr. ss., ex Aquæ Puræ oz. j., quartis horis. Sutures removed; wound dressed with simple-cerate, and covered over with a linseed poultice.

5 p.m. Has an inclination to pass water, but cannot make any. Catheter introduced, and sixteen ounces drawn off.

31st, 2 a.m. Complains of colic pains in the abdomen; eructations of flatus; nausea, and general uneasiness; bowels moved three times. A morphine draught was given by the house surgeon, and hot fomentations ordered to be applied.

10 a.m. Twenty ounces of urine drawn off by the catheter. On removing the poultice a dark sanious fluid issued from the wound. Let him have egg pudding, or good broth. Rept. haust. si opus sit.

November 1st. Wound continues to discharge a dark offensive fluid. A large slough came away this morning, pronounced to be the *glans testis*. Give a more generous diet and porter.

2nd, 2 a.m. Pain in the epigastrium; has vomited much bilious-like matter; the bowels have acted once. Morphine draught and fomentations to be repeated.

10 a.m. Pulse 72, weak; tongue furred; the wound discharges less and looks better. Give egg emulsion and farinaceous diet, with a little brandy or wine, but do not overload the stomach. R. Quinæ Sulph., gr. j.; Acid. Nitric. Dilut. m. x.; Syr. Aurantii, dr. j.; Magnes., dr. ss.; Aq. Cinnam., oz. iss. M. Fiat haust. omni tertia hora sumendus.

4th. In every respect improved. Mutton chop and half-pint of porter. Perg. in usu mist. ter in die tantum.

17th. Health good; bowels act daily; the wound slowly healing. Touch with Sulph. Cupri.

Dec. 1st. Dress the wound with Unguentum Resinæ. A hernia has made its appearance in the inguinal canal of the right side.

21st. The wound being sufficiently healed, let him have a double truss and be discharged. Cured.

STRANGULATED FEMORAL HERNIA, (FOUR DAYS.)

Sophia Linay, aged 37, of weak and delicate constitution, and the mother of eight children, admitted four p.m., May 28th, states that the swelling in the groin first appeared four days ago, during a harassing attack of diarrhœa, since which time she has suffered much pain, been frequently sick, and the bowels could not be moved; feels now pretty easy. She had been under medical treatment from the commencement of the attack without relief. On her admission, Mr. Whiting, in the absence of the surgeon of the week, applied the taxis, and again at eight p.m., and introduced O'Beirne's tube. No urgent symptoms being present the case was left till Mr. Cotton's arrival.

10. p.m. The patient feeling easy and disposed to sleep, said to be from the influence of opium given her previously to entering the hospital, a superficial examination only of a small diffused, firm, and unyielding tumour, receiving no impulse on coughing, situated in the right groin, and covered by a skin of a dusky-red colour, was made by Mr. Cotton, who expressed a doubt whether it might not be an enlarged gland swollen and inflamed from handling, and ordered a linseed poultice.

29th, 10 a.m. Has slept during the night, and taken some bread and milk for breakfast this morning. Has not felt pain nor been sick. The countenance is pallid and pinched; pulse 110, small; the belly is uneven and full, but not tender, and there is frequent borborygmus; flinches from pressure upon and around the swelling; bowels still obstinate. Consultation held. Applicentur tumori Hirud. viij., et postea fotus calidus. When the bleeding ceases, apply poultices smeared with Extr. Belladonnæ. Ol. Ricini, oz. j. statim et post horas ij. rept.

9. p.m. Much the same as in the morning, but seems weaker. An enema of croton oil and gruel thrown up,—returned unaccompanied by fœcal matter. Sumat Calom, gr. v., Opii Extr., gr. iss. hora somni.

30th, 11 a.m. Consultation. Had vomited very offensive stercoraceous matter this morning. The countenance is pale and anxious, breathing quickened, speaks in a whisper. It being decided that the patient should have the chance of an operation, Mr. Cotton, by an incision through the skin and agglutinated and infiltrated coverings of the swellling, laid bare the sac, on opening which, at the bottom, a small quantity of dark bloody fluid escaped, and a knuckle of black gangrenous intestine, the size of a walnut, was found attached nearly throughout by firm adhesions to the sac. These being carefully separated and the crural ring divided upwards and inwards by a blunt-ended bistoury guarded by the finger, the protruded bowel, after a short deliberation, was gently returned within the abdominal cavity. The patient complained of considerable pain, commenced straining, and the bowel was almost immediately forced back into the sac, and a considerable quantity of fluid feculent matter escaped from a small aperture where it had given way. The poor woman was placed in bed, in a position most likely to favour the discharge, which continued up to half-past three p.m., when she sank exhausted.

31st. The *post-mortem* examination shewed feeble adhesion of two or three convolutions and distension of the bowels, and considerable effusion into the peritoneal cavity, having a feculent odour. The strictured part proved to be about two-thirds of the tube of the ileum, which was lying loosely in the sac, black and gangrenous. The distinct ring of strangulation was marked by the peritoneal coat of the bowel alone remaining, through which a small rent had taken place, and the ring was found notched two or three lines deep upwards and inwards, and the peritoneum around dark and congested.

STRANGULATED INGUINO-SCROTAL HERNIA, (SEVEN DAYS.)

William Diver, a sailor, admitted November 4th, at half-past 9 p.m. Has always had a rupture on the right side, which he could partly return, until seven days ago, when it came down whilst doing duty at sea, since which he has had constant pain and sickness, and could not effect its reduction. The bowels had been unmoved. During the last twenty-four hours he has been under the care of a medical gentleman in the town, who kindly attended and explained the treatment which he had pursued. He had also taken medicine from the medical chest of the vessel. The belly is swollen and tender; the pulse small and weak; vomiting stercoraceous. There is a large swelling in the right groin, extending into the scrotum, receiving no impulse from coughing. Venesectio ad uncias xvj.; hot bath, and taxis, applied without avail.

Half-past 11 p.m. It being, in consultation with Dr. Wayte and Dr. De Mierre, considered right that the operation should be immediately performed, Mr. Cotton, in the presence also of Messrs. Allinson, Hale, Smythe, and Rackham, proceeded to lay bare the sac, by a free incision in the mesial line of the tumour, commencing high up, at its neck, and continuing it barely to the upper part of the scrotum. The seat of stricture was found at the internal ring, and divided by a blunt-ended bistoury, directed by the finger. About eighteen inches of intestine, exceedingly dark and chocolate-looking, were carefully drawn out of the scrotal cavity, and returned within the abdomen. Some blood escaped from the sac. The edges of the wound were brought together by sutures, and a compress and bandage applied. The man expressed himself as much relieved by the operation.

5th, 10 a.m. Passed a restless night, and was extremely prostrate. Vomited very offensive stercoraceous matter this morning at five o'clock. The pulse is weak, and small, 120; tongue brown; belly distended and tender; no stool. O'Beirne's tube passed up its full length, and an enema through it, which brought away a few rectal scybala; the patient got out to the night chair, but ineffectually. He gradually became more and more exhausted, and died at eight o'clock p.m.

6th. *Post-mortem* examination. Partial and feeble agglutination of the convolutions, and much flatulent distension of the bowels; the peritoneum dark and infiltrated about the seat of stricture; no effusion into its cavity. Upwards of twenty inches of ileum was found, of a dark-violet colour, pervious to air and fæces; a ring-like contraction marked the point of strangulation; the small bowel, as far as to the cæcum, was dark and congested. A portion of omentum, connected by a narrow neck to that of the belly, and surrounded by the cord, was found in the scrotal sac, much congested, and adherent to an enormous varicocele, which had almost obliterated the structure of the testicle by its pressure. Beneath the capsule of the left kidney several small hydatid-like vesicles, filled with dark serum, were found.

The examination shewed that strangulation had been sufficiently long to destroy the vitality of the intestines, and that the costiveness depended not on the bowel being impervious, but on death having destroyed its functions.

The above are the only operations for strangulated rupture which have taken place since the opening of the hospital, in 1835. It would be trite and common place to remark upon the propriety of early operation in the event of failure of the taxis after the warm bath and full bleeding; the rule I believe is almost invariable. Nevertheless, anomalous and masked cases, as many publications attest, may occur, and mar the intentions of the surgeon. A too precipitate resort to the knife, however, should equally be guarded against. In a case of scrotal rupture, with the usual symptoms of strangulation, which had obstinately resisted the bath, bleeding, and the taxis, I was about to operate, when the size of the protrusion, and the strength of the patient (a hale robust man,) induced me again to place him in the bath, and bleed to faintness, and to use gentle but continued manipulation. Fortunately, my perseverance was rewarded; the gut returned within the belly, the man

experienced instant ease, and recovered without a single uncomfortable symptom.

In another case, an out-patient of mine, (Pamment,) one of incarcerated scrotal hernia, with severe colicky symptoms and sickness, which had resisted the taxis, &c., occurring at night, *immediately after Diver's case*, and under the care of the house-surgeon, I was agreeably surprised to learn that after the administration of an anodyne draught the patient fell asleep for some hours, and that the gut receded almost spontaneously on his awaking.

No long time ago a medical friend in the country requested me to bring my hernia instruments and operate upon a strangulated femoral rupture of three days' standing. On my arrival I found the patient pallid, anxious, and vomiting; the belly full and tender, and an oval tumour, somewhat doubling over Poupart's ligament, existing in the left groin. Before operating I despairingly placed the woman topsy turvy, her head upon the floor, and the nates resting on the edge of of the bedstead, with the thighs closed, and drawn up towards the belly, and applied gentle pressure. In about a minute a commencing decrease of the swelling was perceived and the gut speedily afterwards receded within the abdomen. The patient got well without a bad symptom. A like happy occurrence happened under somewhat similar circumstances a few years ago in a case under the care of Mr. Johnson, of Wathington, Dr. Wayte, and myself.

Lynn, December 26, 1846.

(To be continued.)

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF WILLIAM SANDS COX, ESQ.

By Peter Hinckes Bird, one of the Resident Medical Officers.

(*Continued from page* 17.)

Case XVIII.

PERIOSTITIS.

Mary Anne Harris, aged 22, servant, admitted May 16th, 1846. She states that last Christmas she first perceived a pain in the right leg, which has gradually got worse ever since; had enjoyed pretty good health previously; is not aware that she ever received a blow on the part; thinks that exposure to cold caused it; is rather subject to cough; has never had rheumatism nor ulcerated sore throat, nor blotches on the skin, nor nodes; had leeches applied before she entered the hospital, without permanent benefit.

Present State.—Complains of pain, described as sharp, shooting, in the upper third of the right tibia; the pain is increased on pressure, is worse towards night and in wet weather; the pain extends slightly all down the bone, but is fixed in one spot, which may be covered by half-a-crown; the integument covering this spot is not so moveable as it should be; the skin feels rather hot; tongue coated; bowels confined; pulse feeble; does not sleep well at night; perspires a good deal in the night; no cough. R. Pil. Calom. Co. ij. hora somni sumend.

18th. Bowels open; feels rather better. R. Hydrarg. Chlor., gr. iv.; Confect., q s. Fiat. Pil. ij., hora somni sumend. Hab. Empl. Lyttæ, parti affectæ.

20th. Slept better last night; not in so much pain; blister rose well; bowels open.

27th. Pain not so bad in the morning, but much worse at night; thinks the pain is slightly lessened since the application of the blister; tongue clean; bowels open; health much improved. The part to which the blister was applied is quite healed. Ordered to have another blister applied.

June 2nd. The blister rose well, and afforded considerable relief to the pain; sleeps better.

10th. Blister has quite healed. Ordered to rub in frequently the following ointment:—R. Ung. Potass. Iodid. sæpe adhibend.

14th. Much the same as at last report; still complains of pain, but the pain is more circumscribed. Rep. Emp. Lyttæ.

26th. Blister healed. Has applied the ointment since with benefit.

July 1st. Complains still of slight pain. Rep. Emp. Lyttæ.

6th. Blister quite healed; pain nearly gone. Ordered to continue the use of the ointment.

20th. Discharged cured.

Case XIX.

PERIOSTITIS.

Joseph Marks, aged 54, travelling optician, admitted into the Queen's Hospital, under the care of Mr. Cox, on the 18th, of April 1846. He states that about twelve years ago, he first felt a pain in the left leg, accompanied with slight swelling; is not aware that he ever received a blow on the part; had an attack of syphilis about sixteen years ago; has never had it since; he took medicine for it which he believed contained mercury, as it made his mouth sore; he suffered shipwreck about six years ago off Boulogne. He states that he has been under medical treatment at various times without receiving any permanent benefit. About three months ago he took medicines, which made his gums sore. From the nature of his occupation he has been much exposed to the changes of the weather.

Present State.—He complains of much pain down the left tibia; pain described as sharp, shooting, is exacerbated towards night; the pain is diffused over the whole shaft of the tibia; the bone feels enlarged, uneven, and elevated in various places; the pain is increased on pressure, and by the weight of the bed-clothes; the skin covering the bone feels rather hot, and is described as being "*sore*;" it is covered by desquamations of the cuticle; the skin does not appear to be so moveable over the bone as that of the other leg; he can walk well without much uneasiness; pulse rather slow and small; tongue slightly coated; bowels open; sleeps but little; is prevented from doing so by the pain which feels like fire.

R. Pil. Hydrarg. Chlor., gr. x., alt. nocte sumend.

R. Sol. Magn. Carb., (Palmeri,) dr. iss ; omni mane.
R. Ung. Pot. Iodid., oz.ss, nocte maneque infricand.

21st. Slept well last night; complains of the pain which is very intense at night. Continue medicine.

26th. Sleep occasionally disturbed by the pain; skin not so sore; the bone appears to be smaller. Continue medicine.

30th. Sleeps much better after the pill which he takes at night; the pain prevents him from sleeping on the night when he does not take the pill; the integument not so sore; general health improved; the bone is decreased in size.

May 2nd. The pain is very intense at times in the night, especially when he is warm in bed; in other respects he is better. Continue medicine.

6th. The integument covering the bone is not so tender; he sleeps pretty soundly at times; the size of the bones appears rather less.

9th. Better, except in damp weather, when the pain is much more severe; it rained last night, and the pain was intense; the bone appears smaller; the integument is not so tender. Has taken a walk in the hospital garden.

16th. Much the same; the pain is very severe at times.

22nd. Since last report the weather has been very damp, and he has suffered severely from the "hot fiery pain," being obliged to throw all the clothes off the limb; last night, however, he slept pretty soundly. The integument is not painful on pressure.

24th. Was in very great pain last night, entirely preventing sleep; the integument covering the bone is hot and red, and considerably swelled; tongue rather coated; pulse 92. Omit the ointment. Apply six leeches to the limb,

27th. The leeches bled freely and afforded relief; the integument is not so hot nor painful on pressure; the pain, however, is not much relieved.

June 6th. Rather better; the warm weather we have had lately agrees with his complaint. Ordered to use fomentations, and to have a flannel bandage applied.

20th, Much the same; the pain is perhaps a little easier.

July 3rd. About the same; the pain, however, is not improved.

8th. Rather better; wishes to go home. Discharged relieved.

True syphilitic periostitis, (Case 19,) is more indolent in its progress than non-syphilitic periostitis (Case 18,) and the pain is always more severe at night than in the day, and is also increased in intensity during the damp weather. The pain in the non-syphilitic periostitis is not so intense as in the syphilitic variety. It is particularly disposed to occur on the central portions of the long cylindrical bones, and on such parts of the bones as are not covered by any great thickness of soft parts. In the two preceding cases the front surface of the tibia was the seat of this disease. Simple periostitis is most likely to be mistaken for venereal periostitis; but simple periostitis arises suddenly, and frequently disappears in a short time, without the use of mercury; and it appears to have more of the inflammatory character about it than usually belongs to the venereal variety. The best plan in all doubtful cases is to enquire particularly into the history of the case. We should consider the other symptoms which have previously existed, the order in which they have occurred, and the effect of any treatment that has been tried; and we must draw our conclusion by connecting the present symptoms with all the other information that can be collected. In case 18, no trace of the usual secondary symptoms, nor indeed of any syphilitic taint could be discovered, on the most careful inquiry; while in Case 19, the patient had suffered from a severe attack some time since.

It is the opinion of some that this disease is rarely produced in syphilis unless the patient has been using mercury. The late Dr. Hennen, a man of great observation and extensive experience, affirms that he had never seen more than two cases of nodes in patients who had not taken mercury. It is indeed a fact that we seldom meet with persons who have periosteal swellings unless they have been taking mercury; the patient, (Case 19,) had taken it for its cure; it would therefore seem, as if the action of mercury and the influence of syphilis together, had a share in bringing on these osseous swellings, for patients will take considerable quantities of mercury, and for an immense length of time, as in liver-complaints for instance, without nodes being ever produced.

In the treatment of venereal nodes, Dr. Colles looks to the operation of mercury for the final cure; but he observes, that until the mercury acts upon the system, the part should be repeatedly blistered; but speaking, however, of those nodes which are sometimes excited by the injudicious use of mercury, or by the irregularities of the patient, (of which the Case 19 I believe to be an instance,) which are more frequently seated in the tibia, and in which pain is more widely spread along the limb than in cases of purely syphilitic nodes, he says,—"patients under such circumstances are not fit subjects for the use of mercury.

Blisters, and the repeated application of the Unguentum Potassii Iodidi have been recommended in these cases; but in the preceding case they proved of very little use. Large doses of the Iodide of Potassium administered internally, and incision down to the affected bone, have sometimes proved effectual in these cases. In Case 19, however, the disease seems to have got such a hold on the bone, that it is very doubtful whether it will ever be cured without the removal of the limb, which was indeed proposed at some of the hospitals, after unsuccessful attempts to cure him; it was also proposed to the patient at this hospital, but to this the patient would not consent.

(To be continued.)

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, JANUARY 27, 1847.

Three reform measures have been lately announced for the consideration of the Government and the Legislature,—Mr. Wakley's new Registration Bill, the Memorial of the Royal College of Physicians to the Home Secretary for an amended Charter, and a Memorial from the National Institute of Medicine, Surgery, and Midwifery, also addressed to the Home Secretary, for a Charter of Incorporation for the General Practitioners. Whatever views may be taken of any or all of these documents, it does not admit of question that the objects sought to be obtained are of the highest importance, and, that coming as they do, sanctioned with much consideration on the part of those from whom they emanate, and designed, as we believe they are, with singleness of purpose, for the benefit of the whole or of large and influential bodies of the profession, they are severally entitled to a calm and unbiassed examination.

We say they are entitled to a calm and unbiassed examination, irrespective of prejudice and party consideration, and we can conceive nothing more opposed to good feeling,—nothing more detrimental to the ultimate interests of the medical profession, than a hasty rejection of, or the manifestation of a spirit of undue hostility to, any one of these measures.

Mr. Wakley's Bill is in some respects a manifest improvement on his measure of the last Session of Parliament. It has evidently been carefully revised, and, as we think will be allowed by all, is well calculated for effecting the prominent object which it has in view, of marking at once by a broad line of distinction the genuine medical practitioner from the ignorant and unqualified pretender. Still the additional clauses will require to be carefully examined, and the bearing of the whole measure on the future prospects of a more comprehensive system of reform duly estimated, before it can receive the support of the profession or the sanction of the legislature. We shall not endeavour to prophecy the results of this examination, but content ourselves with expressing our belief, that, with some further modification in what may be termed the accessory details, the measure will be found highly advantageous, and we would commend it therefore to the candid consideration of our readers. Every medical man cannot be otherwise than interested in a measure which not only marks his *status* in the profession and his claims as a qualified practitioner, but extends to him the privilege of practising throughout the entire empire; and provides also more clearly than has hitherto been done, for the recognition of certain rights of exemption from public service, and other general privileges, which ought to be secured without the power of question, to every genuine medical practitioner, whatever may be his grade or denomination.

The Memorial of the College of Physicians for an amended Charter has for its objects the removal and prevention of certain abuses which are at present, or have lately been, dominant in that body—the annihilation of certain exclusive privileges conferred by Act of Parliament very inconsistent with the well-being of the College—the extension of its powers over the whole of England—the admission on liberal terms of all existing physicians, graduates of British Universities, who may not already be possessed of its licence—and the power of confering the degree of Doctor of Medicine on those, who, though not having enjoyed in early life the advantages of a collegiate education, may be found on due examination, possessed of sound practical knowledge, and every way fitted to be admitted into the College. We commend this memorial especially to the consideration of provincial physicians, whom it most concerns; but it is evidently for the benefit of medical science, as well as for the honour of this branch of the profession, that the anomalies and restrictions at present existing should be removed; and that while provision is made for the reception within the walls of the college of every competent physician, some check should be placed on the very indiscriminate manner in which, by the admission of some persons of doubtful qualification, and very questionable moral character, the licence of the College has lost much in the estimation of the profession.

The Memorial of the National Institute has mainly for its object the obtaining of a Charter of Incorporation for a large and influential class of the professsion, who, in consequence of the hurried and secret manner in which the existing Charter of the College of Surgeons was obtained by the Council, and forced upon the members of the College, have found themselves placed in a false position, as well as greatly aggrieved. Whether this or any other mode of remedying the act of injustice which has been perpetrated, and of giving to the general practitioner that *status* in the profession which he enjoys in the estimation of the public and of his professional brethren be adopted, there can be no question that the qualification for the practice of Medicine, Surgery and Obstetrics, which the general prac-

titioner requires, ought to be obtainable without the necessity of passing before so many different examining boards, and paying so many different inauguration fees. It is, moreover, but just and equitable, that the expressed wishes of so large a proportion of this branch of the profession as the National Institute embodies should receive unbiassed consideration, and if found consistent with a due regard to their own advantage and to the exigencies of the public service, should at once be acceded to. Under any circumstance no general measure of reform in which the interests of the general practitioners can be implicated ought to be allowed to pass without a distinct recognition of this body as constituting an independent branch of the profession.

Review.

Urinary Deposits, their Diagnosis, Pathology, and Therapeutical Indications. By GOLDING BIRD, A.M., M.D., F.R.S., Fellow of the Royal College of Physicians, &c., &c. Second Edition. London. 1846. Post 8vo., pp. 356.

The merits of Dr. Golding Bird's treatise on "Urinary Deposits," are well known to the profession, and this early call for a second edition is in itself an evidence of the work being justly appreciated. It may be well, however, to state, that although the short time which has elapsed since the publication of the former edition, precludes the idea of any change in the plan of the work, or any extensive additions to its contents, the later researches on the urine have been incorporated with the text. Among these we find the following notice of a new nitrogenized body, discovered by Pettenkofer, which, as Dr. Bird observes, must be regarded as playing a very important part in the physiology of the kidneys:—

"When an alcoholic solution of the extract of urine, previously neutralized by a little carbonate of soda, is mixed with a spirituous solution of chloride of zinc, an amorphous precipitate falls, followed by the slow deposition of minute crystals of a combination of chloride with this new body. Drain the whole on a filter, and pour on some boiling water, in which the crystals dissolve, and may be obtained, by evaporation, in yellowish quadrangular crystals, not very unlike lactate of zinc, for which they have been hitherto mistaken. On adding barytic water to a solution of these crystals, oxide of zinc and colouring matters are precipitated, whilst chloride of barium, with the new body, remain in solution. The solution being evaporated to dryness, is dejected in alcohol, acidulated with sulphuric acid, by which baryta is separated as a sulphate; and any excess of acid being got rid of by agitation with oxide of lead, the filtered fluid, by evaporation, leaves crystals of the new substance in a pure form.

"This body is neutral, has a bitter, pungent, saltish taste, and readily soluble in water and alcohol. Heated on platinum foil, it melts and burns slowly, evolving an odour of urine and ammonia. Chloride of zinc precipitates it from its watery solution. It contains 54.02 per cent. of nitrogen, and is said to exist in the proportion of five grains in 1000 of urine, exceeding one-third the weight of urea!"

The formula of this new body is said by Dr. Bird to differ "only in the proportions of the elements of water from that of uramil,"—a body which it is stated, "may be regarded as uric acid, in which the elements of urea are replaced by those of ammonia and water." This is, however, rather a loose mode of expressing the affinities of the two compounds. It might possibly be inferred from the passage as it stands, that the main difference between uramil and the new body, was from the presence of oxygen and hydrogen in the proportions necessary to form water, whereas a comparison of the formulæ for each shows a wide distinction.

	C.	N.	H.	O.
Uramil	8 +	3 +	5 +	6
New Body . . .	8 +	3 +	8 +	3

The approach to alloxan, an artificial result of the oxidation of uric acid is more evident. An addition of eight atoms of oxygen to Pettenkofer's formula being the equivalent to one atom of alloxan united with one atom of ammonia and one of water, and rendering probable Dr. Bird's suggestion that the new body may be a transition between uric acid and urea. We would however, observe, that the speculations connected with the formation and solution of these problems, and of the composition of many other organic quaternary compounds, however ingenious and captivating to the imagination, must be received with some degree of hesitation. Many of the analytical processes are difficult of execution, and the discrepancies in the methods pursued and results obtained by different experimentalists, render the value of these atomic symbols, by no means so mathematically precise as the algebraical appearance of the formulæ might lead us to anticipate.

In giving an account of cyanourine, a deposit of a dark blue, inodorous and tastless powder, first discovered by Braconnot, and since noticed by Spangenberg and others, Dr. Bird refers to a modification of blue colouring matter, recently described by Dr. Schmidt, as occasionally occurring in the urine of patients under hydropathic treatment, at Gräfenberg.

"The deposit consisted of ovoid globules, about one-third the size of a blood-corpuscle, and of a fine blue colour. It was partially soluble in hot ether and alcohol, forming blue solutions. Neither dilute sulphuric acid nor ammonia acted on it. Oxalic acid dissolved it, forming a blue solution. Potass, aided by heat, destroyed its colour. No uric acid could be detected."

Dr. Bird suggests that these blue pigments may arise

from some change in a protein compound; and instance the fact, that albumen when boiled with hydrochloric acid forms a bluish solution. They differ from indigo and Prussian-blue, both of which are occasionally found in urine, by characters sufficiently marked. May not the pigment observed in the urine of Gräfenberg patients be some form of altered blood-corpuscle? The continued transmission and transudation of large quantities of aqueous fluid through the blood-vessels and tissues can scarcely take place without the blood-corpuscles being acted on, as indeed the peculiar sodden anæmiated appearance of some of the water-drinkers at hydropathic establishments would seem to shew. The question is one deserving of further investigation, and may probably lead to curious results.

In the former edition the opinion as to the frequent occurrence of oxalate of lime in the urine was advanced, theauthor stating, as the result of his own experience, "that the *oxalate is of far more frequent occurrence in the urine* than the deposits of earthly phosphates. This statement has been since confirmed by the experience of provincial practitioners. Dr. Shearman, of Rotherham, states, and as Dr. Bird believes correctly, "that next to the urates small quantities of oxalate of lime are most frequently met with in the urine. Our readers will remember, in connection with this subject, the interesting observations on the influence of the rhubarb plant in producing oxaluria, published in the last volume of this Journal by Mr. Wilson, of Runcorn, and Mr. Bartrum, of Bath.

The discovery of cystine in the urine of chlorotic girls is an addition to our knowledge of this peculiar deposit, for which we are indebted to the research of Dr. Shearman, of Rotherham; and which, taken in connection with the probable deficiency of oxidation existing in chlorosis is, as Dr. Bird observes, a very interesting circumstance. In a communication addressed to Dr. Bird, the following particulars are mentioned by Dr. Shearman:—

"Some urine passed by a chlorotic girl, after being mixed with ammonia, and set aside in a white phial, evolved in a few days sufficient sulphuretted hydrogen to stain the glass black. When fresh, the urine had a very peculiar odour, and deposited a white sediment unaffected by acetic or hydrochloric acid, but soluble in ammonia. The solution left by evaporation six-sided laminæ, which in all their microscopical and optical properties resembled cystine. Two specimens of urine exhibiting these characters were passed by two sisters; a third was obtained from a girl belonging to another family."

A case was communicated by the same intelligent physician in this Journal, in which living animalcules were found in the human urine. Dr. Bird, in noticing the occurrences of vibriones in the urine, makes the following remarks:—

"Minute animalcules, belonging to the genus vibrio (V Lineola ?,) are occasionally developed in urine, so soon after passing, as to lead to the idea that their germs must have existed in the urine whilst in the bladder. All the urine in which I have found these minute creatures has been pale, neutral, of low specific gravity, and rapidly underwent the putrefactive fermentation.

"I have only met with these animalcules in the urine of persons in an excessively low and depressed state. In cases of syphilitic cachexia, where the prostration of the strength is extreme, and in mesenteric diseases, I have repeatedly found them abundantly developed with remarkable rapidity. They appeared in great abundance in the urine of a patient under my care in Guy's Hospital during the past summer. The subject of this case was a most miserable-looking young man, who entered the hospital half starved, and labouring under polydypsia, passing a very large quantity of urine of low specific gravity. He died of rapid phthisis. In a few weeks the urine became full of vibriones in active motion a few hours after being passed."

The animalcules observed by Dr. Shearman, were probably of the same description, but contrary to Dr. Bird's opinion, must have been generated in the urine previous to its evacuation from the bladder, as Dr. Shearman "*saw* the patient pass some urine into a *perfectly clear glass jar*," which he "*immediately examined*," and discovered the animalcules "enjoying themselves very briskly." Those in some urine passed in the evening, which speedily became alkaline died. Other specimens of urine remained the same as when passed for several days, and in these the animalculæ continued alive and active. The patient was a pale scrofulous-looking man, emaciated and feeble, and probably phthisical. In a patient whose case is reported by Mr. J. H. Stallard, of Leicester, in a subsequent number of the Journal "the animalculæ were present in urine directly obtained from the bladder, and died when decomposition had fairly set in." This patient was also greatly emaciated and laboured under chronic disease of long standing.

We cannot but recommend the study of Dr. Golding Bird's work to all who are called upon to be familiar with the important subjects of which it treats, in short, to every medical practitioner, but before concluding this notice we would direct attention to the laws laid down under the head of therapeutical considerations. They will be found in both editions, but they cannot be too strongly impressed on the practical physician, nor too prominently kept in his recollection.

"*Law 1st.* All therapeutical agents intended to reach the kidneys must either be in solution when administered, or capable of being dissolved in the fluids contained in the stomach or small intestines, after being swallowed."

"*Law 2nd.* Bodies intended to reach the kidneys must, to ensure their absorption, have their solutions so diluted as to be of considerably lower density than either the liquor sanguinis or serum of blood (*i.e.*, below 1.028.)"

"*Law* 3rd. If a sufficient quantity of water cannot be received into the small intestines, or the circuit through the portal system in the vena cava ascendens, or thence through the lungs and heart into the systemic circulation, be obstructed, or if there be excessive disorganization of the kidneys, the due secretion of urine cannot be effected."

This last proposition is deduced in an admirable paper by Dr. G. H. Barlow, published in the "Guy's Hospital Reports," and is quoted from them by Dr. Bird. The following conclusions are drawn from the consideration of these principles:—

"1. Whenever it is desirable to impregnate the urine with a salt, or to excite diuresis by a saline combination, it must be exhibited in solution, so diluted as to contain less than five per cent. of the remedy, or not more than about twenty-five grains in an ordinary draught. The absorption of the drug into the capillaries will be ensured by a copious draught of water, or any diluent, immediately after each dose.

"2. When the urine contains purpurine, or presents other evidence of portal obstruction, the diuretics or other remedies employed should be preceded or accompanied by the administration of mild mercurials, taraxacum, hydrochlorate of ammonia, or other cholitic remedies. By these means, or by local depletion, especially by leeches to the anus, the portal vessels will be unloaded, and a free passage obtained to the general circulation.

"3. In cases of valvular or other obstructions existing in the heart and large vessels, it is next to useless to endeavour to excite diuretic action, or appeal to the kidneys by remedies intended to be excreted by them. The best diuretic will in such cases be found in whatever tends to diminish the congested state of the vascular system, and to moderate the action of the heart, as digitalis, colchicum, and other sedatives with mild mercurials."

Proceedings of Societies.

BATH AND BRISTOL BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

Quarterly Meeting, Thursday, December 17th, 1846, Mr. ORMOND in the Chair.

WARTY EXCRESCENCES OF THE EYELIDS.

Mr. Estlin read a short memoir upon tumours, resembling warty excrescences, that grew upon the eyelids and face; he had been accustomed to designate them in the Annual Report of the Bristol Eye Dispensary as "Soft warts." They vary in size from a pin's head to a small hazle nut, their base not smaller than the projecting part, the white tumours shining through the skin. A minute aperture is observable in them, from which in the larger ones a white substance of the consistence of butter can be pressed out. Their contents cannot, however, be thus entirely evacuated, as each excrescence consists of a cluster of minute encysted tumours. When occurring elsewhere the larger tumour has usually near it several smaller. Many medical men are very familiar with them; others are unacquainted with them: they are chiefly seen at Ophthalmic Institutions. In the last ten years, during which time 20,941 patients attended the Bristol Eye Dispensary, eighty cases of these tumours occurred, being about eight in 1100 patients. The disease is probably that described by Mackenzie, as "Albuminous Tumour of the Eyelids," and unencysted. The contents, however, are proved by the microscope to be epithelial cells; and Mr. Estlin considers their investing membrane well entitled to the appellation of a cyst. Middlemore speaks of them as encysted tumours, arising from an enlargement of a mucous follicle. Guthrie gives them no particular name, but calls them encysted, and describes the appropriate treatment. Others regard them as of the nature of *molluscum*, the third genus of Willan's Tubercula. Some consider them as infectious. Mr. Estlin is inclined to this opinion, though he disbelieves the vulgar notion of the infectious character of the ordinary cuticular warts of children. They are probably diseased sebaceous follicles.

Their treatment was the principal object Mr. Estlin had in view in bringing this point of minor surgery before the meeting. He met with medical men who were teased by the management of these little tumours, and he formerly was so too. Lunar caustic, though freely applied, will often not get rid of them for weeks; nor will potassa fusa, unless so employed as to destroy the whole external surface of skin, which is firmly united to the tumour by vascular connection. This plan is tedious and painful. The most expeditious and least painful method is to slit them quite through with a lancet or cataract-knife, passed perpendicularly to their bases, and then forcibly to squeeze the separated halves, with the thumb-nails placed on the sound skin, till the contents are fairly turned out of their lodgment; the force required to do this will sometimes bruise the skin a little, but in two days the part is usually healed. The tumours when thus removed are found to be lobulated, appearing like miniature brains. If they resist considerable pressure, the loosened portion may be taken hold of with forceps, and thus the whole extracted. This practice may be employed when the tumours have begun to inflame or suppurate. Smaller ones usually disappear without treatment; their chief annoyance arises from the inflammation they occasion in the eye and lids. Children are the chief subjects of the affection.

Mr. Estlin has noticed that either the children with this malady bear pain with great composure, or the tumours possess little sensibility, for it is remarkable how little complaint is made, however roughly the tumours are treated. Specimens of two tumours which had been slit open and expressed were exhibited, as well as a drawing of their various sizes and appearances.

Dr. W. Budd had seen several cases of the disease, and had distinctly ascertained its propagation by contagion. He remembered particularly the case of a nurse, who, from nursing a child suffering under one,

had a crop of similar tumours appear on her temple, where the child occasionally laid its head. She then went home and conveyed the disease thither. Besides, it was not unusual to find them on the necks of those who nursed children affected with them. Whether the disease is a parasitic one, is a very difficult question. The cells composing it are larger than the epithelial cells, and of such extreme tenuity as to break very easily, but he had never been able to discover in them a nucleus. The principle of their contagion seemed to be the transplanting of these cells from one human being to another, which in its relation to cancerous deposits was very interesting. The pathological question is,—Are they composed of enlarged epithelium-cells, or of a parasitic nature? He drew the attention of the members to an excellent account of them by Dr. Paterson, in the *Edinburgh Journal*.

Fever.

Dr. W. Davies then read a paper on fever.*

Mr. Conway Edwards, from observations of the peculiar fœtor and foul state of the secretions, had been induced with much apparent success, to use a solution of chlorine, which he found corrected that state, though he by no means ascribed to the chlorine any specific effects on the virus of the disease.

Dr. Tunstall observed that the peculiar odour emitted in certain stages of the disease was given out through the perspiration.

Dr. W. Budd, in his many examinations of patients dead of fever, had not found the appearances nor results of inflammation; there was no fibrin in the brain, nor inflammatory exudation globules. The disease has all the characteristics of a poison, transmissible from one individual to another, which is often exemplified by an effected individual going into a community previously free of it, and from that single person it very frequently can be traced to have spread under circumstances often the most marked. In those cases characterised by drowsiness, the fluid in the cavities of the skull will be found loaded with urea, which circumstance has a direct influence on the treatment, which should then always be directed to the elimination of the secretion of the kidneys. Louis and Chomel had tried chlorine extensively, but had found it wholly useless; the first cases thus treated were benefitted, but the later derived no advantage from it, so that the result of their whole observation was that this gas is of no avail.

Intra-uterine dropsy.

Mr. King then narrated a case of dropsy occurring in a fœtus of eight months. The mother had borne six children, but did not menstruate between her first and her fifth pregnancies; was "unwell" once when she became pregnant with this child. Between the fifth and sixth months she became anasarcous, and at the time of parturition her abdomen and lower extremities were very large, tense, and hard. Some few days after labour her urine was not albuminous. The labour was natural but the child did not advance, though the pelvis was large, and the head of the child could be freely moved therein. The uterus was excited to action by two doses of ergot, and the child, with some difficulty, caused by the size of its body, brought down. At birth it measured round the waist sixteen inches and a half. The next day the serum had drained through the skin, partially denuded of its cuticle, and saturated the clothes in which it lay.

Mr. Soden mentioned a case of hæmorrhage of florid blood of some hour's duration, from the ear, after the removal of a small polypus, stopped by a short application of lint soaked in the tincture of matico.

Mr. Hetling gave the particulars and exhibited a specimen of rupture of the uterus.

Medullary sarcoma of the liver.

Dr. Cardew exhibited a case of medullary sarcoma of the left lobe of the liver. The man, aged 60, was admitted with a tumour in the epigastrium. Two months previously, while at work, he was seized with pain in the epigastrium,—which pain gradually increased. There was no jaundice nor vomiting, till a fortnight before death; the sickness was then controlled by salines, with prussic acid. On examination, the tumour consisted of curdy medullary matter, somewhat like cream, mixed with blood. There was an ulcerated opening into the cavity of the stomach, and a communication with the layers of the mesentery; the gall-bladder was filled with healthy bile; there was a mass of the same disease beneath the pylorus obstructing it; the right lobe of the liver was unaffected, so that the bile was eliminated, explaining the absence of jaundice.

Ovarian disease.

Mr. Norman narrated a singular case of ovarian disease. He was called to examine a lady, with all the symptoms of ovarian dropsy. The abdomen was large, tense, and fluctuation was most distinct. The swelling had begun at the right side, had lasted several months, and much impeded respiration. It was decided in consultation, that tapping would afford considerable relief; the trocar was passed, but no fluid came; and after clearing the canula, under the idea of some obstruction to the passage of the fluid, it was withdrawn without any fluid following it, or any aggravation of the symptoms. She became weaker, and after four or five weeks died. On *post-mortem* examination, the trocar was again passed, without giving issue to any fluid. On opening the abdomen, the cavity of the peritoneum was found full of a gelatinous substance like glue, which could be drawn out in long strings, and would not drop. This tenacious fluid could with difficulty be removed, though a bucket full was taken out. There was then found a cyst of the right ovary, not capable of holding a quarter of the fluid taken out. The cyst appeared to have burst, then lessened in size, while the secretion still went on from its lining membrane into the cavity of the abdomen, causing the sense of fluctuation.

Dr. Blackmore then gave the particulars of a case of nodulated ovarian disease. There could be felt

* This paper is given at length at page 36.

three distinct sacs fluctuating under the hand, and the fluid could be pressed from one cyst into the other. From the reduced and weak state of the patient, nothing but graduated pressure was recommended; after a while, a quart of thick puriform fluid was at once discharged from the vagina; discharges of such matter lasted for six weeks, while she gradually regained her flesh, lost her night sweats, hectic, &c.; and on her recovery, it was found that two of the cysts had disappeared, and that the smaller one alone remained.

SHEFFIELD MEDICAL SOCIETY.

Seventh Meeting.—December 23rd, 1846.

The PRESIDENT (Mr. TURTON,) in the Chair.

MENINGITIS.

Mr. Beckitt exhibited the brain of a man, aged 37, an ostler, who had laboured under epilepsy during the last eighteen years, and who died of subacute meningitis, of one week's duration. The brain was very heavy and firm; there was a cyst in the anterior part of the left hemisphere, and the choroid plexuses were large. He was, at the commencement of the attack, violently delirious, but effusion taking place, he became comatose and died in that state.

ANEURISMAL VARIX.

Mr. Thomas related the particulars of a case of aneurismal varix, at present under his care in the Infirmary. The man, aged 25, was closing the "sheep-foot blade" of a common pocket knife, by pressing it against his thigh, when it slipped and penetrated the limb, piercing the artery and vein midway between Poupart's ligament and the knee. Profuse hæmorrhage occurred, which was stopped by carefully applied pressure. A few weeks after the accident, he was brought to the Infirmary, at which time the limb was in a very atonic condition, exhibiting a number of unhealthy ulcers. The patient's general health was suffering. There was a very loud continuous bruit, resembling the *bruit de diable*, (increasing with each pulsation,) audible over the cicatrix, when the ear was four inches from the stethoscope, and extending along the whole course of the femoral artery. By the continued use of pressure, and a generous diet, with stimulants, his general health had been much improved, and the limb also, the ulcers having healed, but the continuous bruit is still very loud.

ABSCESS IN THE ABDOMEN.

Mr. Thomas then detailed a case of abscess of the abdominal parietes, which simulated distension of the urinary bladder, in a boy, aged 5. His health had been very good until about sixteen months ago, when an abscess formed in the perineum, which, on being opened, discharged a small quantity of pus, and soon healed. Last month he suffered from an attack of measles, and since then, a tumour formed in the hypogastrium; the scrotum became œdematous; has had great pain about the region of the bladder, and some difficulty in passing urine. His medical attendant suspected that there might be a calculus. On his admission into the Infirmary, he was in very great pain, and the hypogastric tumour completely resembled a distended bladder. Mr. Thomas finding an abscess existing in the perineum, opened it, and evacuated a considerable quantity of purulent matter, on which the hypogastric tumour entirely disappeared, and the patient is now rapidly recovering.

CANCRUM ORIS.

Mr. Micklethwait detailed the case of a child, aged 5, who suffered from hooping cough and tubular bronchitis, to whom he gave, in the space of ten days, Hydrarg. cum Creta., dr. j. The mouth became sore, without any flow of saliva. The soreness became confined to the left cheek, which soon presented the appearance of cancrum oris, which destroyed the cheek, opened the commissure of the lips, and destroyed the gums, teeth, and part of the tongue of that side, and terminated fatally in five days after the appearance of the gangrene. The child complained of excruciating pains of the hands and feet, which directly after death became very black. It had suffered from erysipelas of the same cheek three years ago, and ever since, that side had been less in size than the other.

Mr. Skinner mentioned two cases of cancrum oris, one of which was in a child to whom he had given mercury for pericarditis, and which recovered with some deformity; the other in a child who had measles, to whom no mercury was given, which terminated fatally.

[Some years ago, we had occasion to witness the occurrence of cancrum oris in connection with measles. Mercury had not been given in the cases alluded to, and one of the cases terminated fatally. ED.]

MEMORIAL OF THE NATIONAL INSTITUTE OF MEDICINE, SURGERY, & MIDWIFERY.

To the RIGHT HONOURABLE SIR GEORGE GREY, BARONET, *Her Majesty's Principal Secretary of State for the Home Department, &c., &c.*

The Memorial of the President, Vice-Presidents, and Council of the NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY,

SHEWETH:—

That your Memorialists are Legally qualified Members of the Medical Profession and are General Practitioners of Medicine, Surgery, and Midwifery. That the National Institute is a voluntary Association of General Practitioners in Medicine, Surgery, and Midwifery; that your Memorialists have been duly elected the representative Council of the National Institute; and that they represent the opinions of above four thousand of the General Practitioners of England and Wales.

That Medicine, Surgery, and Midwifery, are departments of the same Profession; which Profession—in a scientific and educational point of view—is essentially one and indivisible; although, for the convenience of the Public, it has for a long time past consisted of three classes, viz.,—Physicians, practising Physic only; Surgeons, professing to practise Surgery only; and the

class of Practitioners of which your Memorialists constitute a large proportion, practising not only Physic and Surgery, but Midwifery also,—the last mentioned branch not being comprised in the range of practice generally undertaken by the members of either of the two former classes; and that this tripartite division of the practice of Medicine must continue to exist.

That, of every hundred Practitioners in this country, more than ninety belong to the class which your Memorialists represent; and that the greater number of the individuals constituting this numerous class are Legally and fully qualified as General Practitioners, by possessing a Licence to practise Medicine, and a Diploma, granted after an examination by the College of Surgeons, and qualifying them as Surgeons; although there are many exceptions to this rule, arising out of the anomalous state of the existing laws relating to Physic and Surgery.

That the General Practitioners have ever been, and still continue, the ordinary professional attendants of many members of the aristocracy, and of by far the greater proportion of the middle classes of society, and that they may be considered exclusively the Medical Advisers of the labouring population of this country; Physicians and Pure Surgeons acting as Consulting Practitioners, and their assistance being called for in cases of great emergency or difficulty arising in their respective departments; and that the Physician or the Pure Surgeon, or both, educated specially, and confining their practice to their respective departments, can never supersede the necessity which exists for a competent body of Medical Practitioners performing all the functions of the present class of General Practitioners, and educated to the highest practicable standard of qualification in the science and art of Medicine and Surgery.

That, in further illustration of the views of your Memorialists, your Memorialists regard the division of Medical Practice into distinct departments, as those of Physic and Surgery, presided over by special Institutions, and represented by different individuals, as an arrangement chiefly adapted for densely-populated and wealthy communities, and generally available by the rich only; and that, even in the Metropolis and in the larger towns, the General Practitioners must always constitute a majority of the Profession, while in country districts, the division of labour here indicated is totally impracticable; and your Memorialists have a thorough conviction that the well-being and comfort of every class in this great community are more or less dependent upon the competency and skill of this class of Practitioners; and that every defect in the Medical Institutions of the country, or any line of policy calculated to retard the progressive improvement of the General Practitioners, or to depress the standard of their qualification, or to diminish their scientific and practical attainments, or in any way to lower their status in society, has not only the effect of debasing the character of the Profession in this country, and of retarding the progress of Medical Science, but is fraught with incalculable, direct, and consecutive evils to society at large.

That, notwithstanding these considerations, the General Practitioners of Medicine, Surgery, and Midwifery are without a head or home amongst the Institutions of this country, and their position is at present most anomalous. They are acknowledged as Practitioners of Medicine alone, under the Apothecaries' Act, and they have been recognized as Practitioners of Surgery alone by the College of Surgeons: neither the Society of Apothecaries nor the College of Surgeons recognizes them as Practitioners of Medicine and Surgery—as one Profession. The *College of Physicians*, by its constitution and bye-laws, can have no sympathy with them, but a direct interest in maintaining the class in point of education, general and professional, and qualification to practise Medicine at as great a distance from the standard of that College as possible. Since the recent grant of a Charter to the *College of Surgeons*, that College has no sympathy with them, but has a direct interest in maintaining them in point of general and Professional education and qualification to practise Surgery at as great a distance as possible from the standard of qualification adopted for the fellowship of that College; and the College of Surgeons has, moreover, rendered it totally impracticable for any great proportion of them as General Practitioners—although possessing its own Diploma as Surgeons—ever to become Fellows of the College. The examinations instituted by the *Apothecaries' Society*, and their Certificate relating only to the practice of Medicine, obviously are inadequate to their present requirements; and yet, by a singular anomaly, this Society is the only body capable of giving a Legal title to practise.

Thus, although, as your Memorialists have shown, the General Practitioners constitue an indispensable professional body, which has been created by the customs and necessities of the community at large, and although they have progressively increased in numbers, and may now be estimated at many thousands, and have rapidly advanced in scientific and professional acquirements, and are possessed of great individual influence, they are unknown in a collective capacity; and legislative enactments have been attempted under the auspices of special Institutions, representing particular sections of the Profession, having interests peculiar to themselves, and diametrically opposed to those of the General Practitioners, without even an allusion to their existence. And your Memorialists most emphatically declare, that this anomalous state of the Profession operates as a direct infliction of the greatest evils upon society, especially by the systematic efforts which it engenders to depress the attainments, the character, and the status of the General Practitioners, and by arresting the progress and preventing the diffusion of knowledge in the great body of the Profession.

That, for these and other considerations, it has for a long time past been acknowledged by all parties, that the laws affecting the Medical Profession are most defective; and your Memorialists having been led to hope that the present Government may entertain the question of Medical Reform during the ensuing Session of Parliament, your Memorialists have felt it their duty respectfully to call the attention of the Government to

some of the more prominent circumstances relating to the class which they represent; and they have felt called upon to do so at the present moment more especially, as various attempts have been made from time to time to induce the Legislature to revise the said Laws; which attempts have failed, owing—according to the belief of your Memorialists—to the interests of the General Practitioners, as before recited, not having been duly recognized, and the Public welfare, as connected with the efficiency and respectability of the great mass of the Profession, having been accordingly entirely overlooked.

That, in the opinion of your Memorialists, the principle objects of Legislation in Medical affairs are, to promote the Public health, by securing the education of a sufficient number of persons for the practice of the Profession to meet the Medical and Surgical exigencies of the community, to ensure the advancement of Medical and Surgical knowledge and its general diffusion among all classes of the Profession, and to protect the rights and privileges of the Public, and of qualified Practitioners, by rendering it penal for unqualified persons to practise.

That different plans of Medical Reform having been suggested, but every attempt to effect such reform having hitherto proved abortive, and your Memorialists having stated truly what they believe to have been the chief cause of failure in these attempts, your Memorialists do not desire, upon the prseent occasion, further to press their own opinions upon the Government as to the principles, or to enter into the details of a measure of Medical Reform; but they are anxious to assure the Government that they would most gratefully accept of a settlement of this long-agitated question, from whatever source it may come, provided the interests of the General Practitioners were duly regarded in any measure that may be proposed, that efficient Medical and Surgical advice and attendance were secured for all classes of the community alike, and that proper encouragement were given to the advancement and diffusion of Medical and Surgical knowledge. At the same time, your Memorialists, aware, from their former experience, of the obstacles that are likely to be opposed to Legislation on the subject of Medical Reform, feel it their duty further to state that, although they would be willing to accept such a modification of either of the existing Institutions as should make it the head and home of the General Practitioners, giving the General Practitioners therein the means of securing a complete and efficient Medical and scientific education for their own class, yet they have a strong conviction that the objects of Medical Reform can only be certainly attained by the stablishment of a New College, distinct and different from either of the existing special Institutions, which shall embrace all persons possessed of any recognized qualification or license whatever, and in actual practice as General Practitioners at the time of its foundation, and shall provide for the education and qualification of all its future members; and further, your Memorialists cannot refrain from the remark, that the founding of a New College, in accordance with the spirit of the present age, is worthy the consideration of a paternal Government, and of a social reform Ministry; and that such a step would develop the energies of the Medical Profession in a manner and to an extent hitherto unprecedented in this country,—would maintain the respectability of the great mass of the Profession—would promote the science and art of Medicine and Surgery; and, inasmuch as the duties of the General Practitioners have an intimate connection with every Legislative proceeding bearing upon Public Hygiene and Sanatory improvement, would be one of the most direct and efficient means of ameliorating and preventing those social evils which are acknowledged to prevail to a lamentable extent in this highly civilized community.

That your Memorialists therefore pray that no Bill affecting the Medical Profession may be brought into Parliament which does not recognize the General Practitioners as a class, and provide for them an efficient control over the education of the members of that class, so that they may not only maintain the high standard of qualification which is now adopted, but that, by the cultivation of collateral sciences, they may promote the progressive improvement of the class, and thereby secure the true respectability of the great body of Practitioners in this country, to whose skill and judgment the limbs and lives of the mass of the population are entrusted.

Your Memorialists, in conclusion, have only respectfully to call the serious attention of the Right Honourable the Secretary of State, to the facts, opinions, and sentiments contained in this Memorial, in full confidence that matters of so much importance to the Profession of Medicine in this country, and to the Public interests, will meet with due consideration, and respectfully to request that an opportunity may be afforded them of giving, as they are prepared to give, the fullest explanation that may be required by a Deputation from their body, or otherwise, as may be most convenient.

(Signed,) ROBERT RAINEY PENNINGTON.
President.

Offices, *pro tem* : Hanover Square Rooms,

General Retrospect.

PATHOLOGICAL CHEMISTRY.

ON THE CHARACTERS OF THE URINE, THE BLOOD, AND THE DROPSICAL EFFUSIONS IN ALBUMINURIA.

Heller has recently published a long memoir in which he has displayed the results of numerous researches relative to the pathological characters of the fluids, in albuminous nephritis. As this memoir gives a very complete insight into our knowledge on the subject, we think the following brief analysis may be acceptable to the readers of the *Provincial Journal*.

1. *Characters of the Urine.*—The progress of albuminous nephritis comprises three distinct periods, each of which is characterised by particular modifications in the urine. In the first or period of congestion, the secretion has a deep red colour, which is due to

the presence of blood, or at least to its colouring matters. Nevertheless the reaction is ordinarily acid, excepting blood be present in an unusual quantity. In the second or chronic stage of the disease, the urine is more pale, of a straw colour; while in the third period, it again contains blood, but it is at this time strongly alkaline, ammoniacal and fœtid. The secretion of urine is usually diminished during the whole course of the disease, excepting in some rare instances in the chronic stage, when its quantity is augmented.

In the first period, the urine, which is turbid, and high coloured, deposits either a whitish sediment, or a sediment which is coloured by the mixture of blood-globules; the super-natant liquor is at the same time clear and red. The presence of the perfect blood-globules is not, however, in all cases, the cause of the deep colour of the urine; it is sometimes due to the hæmatosin alone. The urine may be acid, neutral, or alkaline, and its specific gravity is always below par. In the second period, in which the urine is turbid but clear, the deposit is of a browner colour; in this period the reaction is acid. Later, the urine is often very pale, like thin whey, and deposits a light-coloured flocculent sediment; the urine at this time rapidly becomes ammoniacal; its specific gravity is, as before, diminished. In the latter periods the deposit is again reddish, from admixture of blood-globules; it is sometimes ammoniacal at the moment of excretion, but at all events soon becomes so; the specific gravity also rises.

In examining microscopically these various sediments, it is perceived that they are composed of two classes of materials, one comprehending those which are normally and constantly present in urinary deposits; the second, those which are accidentally present. The constant ingredients are:—1. The *Pavement epithelium*. This epithelium is always found in large quantity, especially at the commencement of the disease, at which time the deposit is almost entirely composed of it. The epithelial cells are not, however, of a natural figure, being rather round than oval, with very distinct nuclei.—2. The *Epithelium of the tubes of Bellini*. This epithelium is generally small in quantity at the commencement of the malady, wherein it differs from the former. It presents itself under the form of colourless canals, containing brownish nuclei of variable size. Considerable attention is required to detect the species of epithelium in the urinary deposit, as it is frequently so transparent as to elude observation.—3. Albuminous flocculi. (*Albumin pilze.*) These are very distinct, especially when the urine is alkaline, of various shapes and sizes, and resemble fragments of pearls.—4. *Mucus-globules*.—5. *Inflammatory globules*. These are found for the most part during the stage of congestion.—6. *Fatty globules*. Which exist principally in the chronic stages of the disease.

The accidental matters found in the urine of Bright's disease, are,—1. *Crystals of uric acid*, for the most part colourless and of a rhomboid figure.—2. *Urate of Ammonia*, which exists principally in the early stages.—3. *Pus*, generally seen in the early periods.—4. Crystals of *uro-glaucin*. These crystals are seldom seen in the urine at the time of excretion, but are often visible after it has stood for some time. They appear as a crystalline mass of an indistinct blue colour.—5. Crystals of *ammoniaco-magnesian phosphate*.—6. *Carbonate of ammonia*. Both these are peculiar to the last stages.

The re-action of the urine is almost always acid in this disease, which reaction Heller thinks is sometimes due to the uroxanthin, as it cannot always be accounted for by the presence of uric or hippuric acid. The effect of the presence of blood in any quantity is to render the urine alkaline. In the latter stages the alkalinity is due to the development of carbonate of ammonia.

The *specific gravity* is variable. In one instance observed by Heller, it ranged from 1.006 to 1.048. In order to gain a correct measure of the specific gravity, the albumen should be first coagulated by heat and afterwards separated by filter.

Among the different substances contained in the urine of albuminous nephritis, there are some which require special mention, and first of the *uroxanthin*. This substance presents itself in solution as a yellow colouring matter, and exists in considerable quantity, changing either immediately or more slowly to a violet colour, after the precipitation of albumen either by heat or nitric acid. *Albumen* is another constant ingredient, but varies greatly in quantity; sometimes it is scarcely to be recognised, at others the urine coagulates into a solid tremulous mass. At the close of the disease the albumen often nearly disappears. *Urea* is always present but in diminished quantity. The *salts* are less abundant than natural, not only absolutely but relatively.

2. *Characters of the Blood.*—The blood in this disease loses its density in a notable manner, in consequence of the loss of albumen. It, however, retains its natural appearance and coagulates perfectly. The serum is pale and of a low specific gravity. It contains urea in considerable quantity, but no biliary colouring matter. The fibrin and globules are not materially changed. The chief alteration therefore consists in a loss of albumen and the presence of urea; the latter condition, however, is not peculiar to the disease in question, but is observed also in cholera and in ischuria renalis.

3. *Characters of the Dropsical effusions.*—This fluid is of a pale yellow colour, alkaline, and of a low specific gravity. It contains albumen in small quantity, a circumstance which distinguishes it from the fluid of other forms of dropsy, in which, on the contrary, albumen is abundantly present. It never contains the colouring matter of the bile. By rest it deposits a small quantity of fibrin. It contains also epithelial cells, and salts in large quantity, and more particularly the chloride of sodium.

It is evident, therefore, from the above researches, that the constituents of the urine, blood, and serous effusions in albuminous nephritis preserve a certain definite relation. The water which should pass into the urine is found in the effusions; the albumen which is missed from the blood, is found in the urine,

and to a small amount in the effusions; the urea deficient in the urine is discovered in the blood; and lastly, the salts which are absent from the urine appear in the dropsical effusion. *(Archiv. für Physiolog. und Patholog. Chimie und Microscopie.* 1846. t. 2.

PATHOLOGY.

BRIGHT'S DISEASE OF THE KIDNEY.

The following conclusions, drawn by Dr. George Robinson, are the result of his researches on the pathology of Bright's disease:—

1. That the epithelial or secreting cells of the healthy kidney contain a certain quantity of oil; the proportion of which, under certain circumstances, and, within certain limits, may fluctuate considerably.

2. That it is an excessive increase of this fat leading to engorgement of the epithelial cells, and of the urinary tubes, which constitutes primarily and essentially Bright's disease of the kidney.

3. That the presence of albumen and blood in the urine, and the wasting of the tissue of the kidneys, are secondary phenomena, dependent on the mechanical pressure of the accumulated fat.

4. That, in the majority of cases, Bright's disease is associated with a similar fatty degeneration of the liver and arteries, and frequently of the valves of the heart; these diseases being related to each other as joint effects of one common constitutional cause.

5. That probably acute inflammatory dropsy, occurring in a person previously healthy, and the dropsy which occasionally supervenes upon scarlatina, have no necessary connection with Bright's disease of the kidney.

6. That most important evidence of the approach and presence of the renal disease may often be derived from a microscopical examination of the urine, in which will be found fat in unusual quantity; partly in the form of free oil globules, and partly contained in epithelial cells which have escaped from the urinary tubes.

7. That the insight which we have obtained into the peculiar change which the kidney undergoes in Bright's disease, and the knowledge we possess of the simultaneous occurrence of a similar change in other organs, may serve as important guides in the prevention and cure of the disease.—*Medico-Chirurgical Transactions, Vol.* 29.

PRACTICAL MEDICINE, &c.

DIAGNOSIS OF NEURALGIA AND NEURITIS.

Although in some cases the symptoms of these two affections of the nerve are so nearly similar, that it is difficult to distinguish at first sight the one from the other, the confusion will cease in general, if, instead of inquiring into the actual condition of the patient, our inquiries are directed to the prior history of the attack, its progress, and exciting cause. While, in fact, *neuralgia* is a very common affection, arising without appreciable cause, or from causes the most opposite in character, *neuritis* is a rare affection, and is determined by causes which are readily appreciated. In analyzing the best authenticated cases of neuritis, it will be found that, with the exception of some few cases, in which it followed parturition, neuritis has almost constantly been produced by physical lesions of the nerve,—such as wounds, punctures, contusions, ligature, compression by a tumour, &c.; in fact, neuritis is always, or nearly always, the result of mechanical injury, while neuralgia originates spontaneously, and depends upon a particular, and little understood, condition of the economy. But if it is sometimes possible and useful to establish this distinction in practice, especially in neuralgia and neuritis of recent date, it cannot be denied, that in a certain number of cases of chronic neuritis, the distinction becomes impossible; for although it has been ascertained that neuralgia of very old standing (thirty or forty years for example,) may have preserved its original character throughout, and yet left no traces of disease after death, it happens in the majority of cases, that under the influence of the repetition of the paroxysms, the texture of the nerve eventually becomes altered to such a degree, as to render it quite impossible to decide whether the inflammation has been secondary, or has depended upon an original neuritis. These cases shew the inutility of attempting a diagnosis in the chronic forms of the affections.—*Gazette Médicale de Paris*, No. 40, 1846.

THE URINE IN ASCITES.

In ascites, dependent on lesion of the liver, the urine is always more or less deeply coloured; whilst in renal ascites, (Bright's disease or otherwise,) the urine is white and colourless—(*Rayer.*) This characteristic condition of urine in ascites was perfectly known to the Arabian physicians.—*Monthly Journal of Medical Science*, December, 1846.

TINCTURE OF CANTHARIDES IN BRIGHT'S DISEASE.

This medicine, in the dose of from fifteen to twenty drops, "par pot de tisane," combined with the use of decoction of bark and chalybeates, is the remedy which has given the best results in the treatment of albuminous nephritis,—(Bright's Disease.) Many cases have already been cured by this treatment.—*Ibid.*

TREATMENT OF EPISTAXIS BY INSUFFLATIONS OF ALUM.

When hæmorrhage from the nasal cavities assumes a dangerous aspect, recourse is generally had to plugging, a measure both inconvenient and painful. M. Lecluyse has successfully employed means far more simple, and at the same time, according to his own account, more certain—namely, the insufflation by means of a quill of equal parts of powdered gum arabic and alum. In one case this succeeded after three repetitions; other means, and plugging among them, having entirely failed.—*Gazette des Hôpitaux*, Nov. 3, 1846.

SURGERY.

SALIVATION FROM CAUTERIZATION OF THE CERVIX UTERI WITH ACID NITRATE OF MERCURY.

M. Lisfranc has observed that the application of this form of mercury will produce salivation in about one case in two hundred; but the symptoms are not in general severe. In one case, however, a female, in the ward of St. Augustin, in the Hospital of La Pitié, a single cauterization produced an abundant and obstinate

ptyalism. [This fact is worthy of being remembered, not only as contradictory of the opinion generally entertained of the comparatively low vitality of the cervix uteri, but as a caution which should not be without value, in reference to the mode of treating uterine engorgements now much in vogue.]—*Gazette des Hôpitaux*, Octobre 17, 1846.

ON THE DIVISION OF THE TENDO ACHILLIS.

Professor Stromeyer has lately published the following propositions, in which he lays down the indications for, and the manner to proceed in, dividing the tendo Achillis:—

1. The tendo Achillis ought be divided with a small thin knife, with a sharp point, and slightly rounded, employing the subcutaneous section, and cutting from within to without, taking care to make but one puncture of the skin.

2. The tendon must be entirely cut through or the operation will be unsuccessful.

3. When other muscles or the plantar aponeurosis are retracted at the same time as the tendon, the former must always be divided before the latter.

4. After the operation the wound must be dressed with compresses, bound on with a bandage in the figure of eight.

5. With adults, on the fourth or fifth day after the operation, and with children, on the third or fourth, the first dressing must be removed, and if (as is often the case,) the wound is found to be healed, it must be opened again; this must never be done when there is great ecchymoses, or when the wound suppurates.

6. Before putting the foot in the machine for extension, the limb must be surrounded by a sound bandage, and some pads of cotton must be placed on all the parts that are to be submitted to great compression.

7. Extension must be proceeded with gradually and slowly, lessening it each time it gives pain to the patient.

8. The dressings must be removed if the patient suffers much and continued pain in the parts compressed, in order to avoid excoriations, erysipelas, or mortification of the tissues.

9. Immediately upon taking off the dressings the limb must be enveloped in wool.

10. It ought to be known, that all those who have had the tendo Achillis divided, have felt a sensation of cold and numbness, which is sometimes limited to the heel, sometimes extends over the whole limb. This sensation gradually diminishes, and generally disappears entirely by the sixth or eighth day.

11. The first day or the next morning after the operation, a viscid sweat of a disagreeable odour comes out on the foot, although the patient has never previously been subject to perspiration of the feet.

12. In placing the foot in the extension machine, it ought to be put in such a direction as to form a right angle with the leg; and this position ought to be maintained for eight days. After this period has elapsed, the limb must be enveloped in a circular bandage, and the patient must not be allowed to make any attempt to walk before the fourth week. Without this care, the limb will swell, the wound become irritated, and perhaps even the new tissue will give way.

13. It is impossible to name precisely the duration of the treatment. This must in some degree depend on the state of the patient, the degree of the deformity, and the extensibility of the articular ligaments.—*Ib.*. Nov. 10, 1846.

FORENSIC MEDICINE.

ON THE POSSIBILITY OF PRODUCING BURNS AFTER DEATH RESEMBLING THOSE PRODUCED DURING LIFE.

A reference to any work on Forensic Medicine will shew the reader that the distinction between burns inflicted prior to, and after death, is considered to be sufficiently precise. It would appear, however, from the experiments of M. Champouillon, that vesication which is considered to be characteristic of burns occurring during life, may be exactly imitated under certain circumstances after death. "It is not," says M. Champouillon, "by the immediate contact of a heated body, with an infiltrated limb, that it is possible to induce phlyctenæ in a corpse; we may in this manner induce vesication, it is true, but the elevated epidermis encloses air and not serosity." The number and size of the *vesications* according to him depend upon the temperature of the heated body, its distance from the skin, and the length of time the latter is submitted to its influence. "If," he adds, "a heated body, such as a red-hot bullet, be placed at a few centimetres distance from an anasarcous limb, no appearance of vesication is produced." If, on the contrary, it be placed within a convenient distance, one or more vesications are constantly produced. An attentive study of the causes which give rise to this phenomenon have shewn him that it is due to the effect of caloric upon an œdematous part,—a tissue charged with serosity. The action is no other than the rarefaction produced by the calorific body on the circumambient atmosphere, which rarefaction is proportioned to the degree of heat and the radiating power of the heated body. In anasarca the effused fluid diminishes the force with which the different laminæ of the cutaneous tissue cohere together; and it happens, therefore, that when by the rarefaction of the air near the heated body the atmospheric pressure is removed from the subjacent part of the corpse, the fluid accumulates there in virtue of a well-known physical law, and thus induce an elevation of the epidermis. M. Champouillon remarks, that these phlyctenæ do not appear instantaneously, but require the application of heat for six hours as a mean. As regards the red circle which Christison so strictly insists upon, as a proof of burning during life, Champouillon states that he has in no case failed to produce it in the corpse; but he allows, that however closely the red circle thus produced resembles that produced during life, the semblance is only superficial, and a difference is at once perceived by incising the skin. In the first case there is but a simple injection of the cutaneous capillaries; in the other there is evidence of vital re-action, in a concomitant extravasation of blood.

The results of the authors' researches tend to establish

that there is no sufficient *apparent* difference between burns before and burns after death, and thus the question can only be determined by a dissection of the skin, and that the distinction laid down by Christison fails in the case of an œdematous corpse.—(*Gazette Médicale de Paris*, No. 40. 1846.

OPIUM IN INFLAMMATION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Permit me to remove a misconception that occurs in Dr. Ranking's valuable paper on the employment of opium in inflammation. In regard to my views on that subject, he says, "The constipated bowels which Dr. Chambers, in the last number of your Journal, seems to regard as indncing the necessity for hesitation in the use of this medicine, I regard as of the least importance in the generality of inflammations." I did not apply that particular remark to its use in inflammation, nor did I for one moment wish to say that such an effect would contraindicate its use in any inflammation, in which it was otherwise indicated. But on the contrary, I look upon constipation as salutary in cases of enteric and peritoneal inflammation, and the purgative treatment of these diseaes to be both vicious in principle and bad in practice. In consequence of observing that the constipation attendant upon enteric inflammation yields *pari passu* with the removal of the inflammatory symptoms, it was supposed that the relief was owing to the soluble state of the bowels; whereas, I believe we must only regard this state as the consequence of the amendment in the inflammatory symptoms.

My observations on the constipating effects of opium were as follows:—"In reference to the employment of opium *generally*, I may remark, that the constipation which it causes, renders it obnoxious to some constitutions." There are several diseases not altogether of an inflammatory type in which the influence of opium is urgently required either to relieve pain, or to procure sleep. I would more particularly mention cases of common continued and irritative fevers, and cases of neuralgia. It frequently happens, however, that in consequence of the constipation which opium produces, its employment causes the patient as much discomfort as more than counterpoises whatever relief it may afford. In some cases this effect becomes at once apparent by the furred tongue, dry skin, and headach; in other cases the effects exhibit themselves by a long-continued derangement of the digestive function. If, then, it is possible to prevent all these effects without interfering with the physiological action of opium, is it not desirable to do so?

It would, indeed, be taking a very limited view of the matter to direct our attention merely to the constipation; we must look beyond the effect to the cause itself, which I believe to be an arrest of the biliary secretion; and, when we remember the influence which an arrest of secretion in so large a depurating organ as the liver must exercise over the quality of the blood, I consider its removal or prevention of the first importance. It appears to me that the coma of jaundice, to a certain extent, proves the correctness of my views of the subject.

In conclusion, allow me to say that I feel convinced that Dr. Ranking's misconception of my views was unintentional, and I should not have occupied your pages, only that the importance of the subject itself required it.

I am, Sir,

Your obedient servant,

RICHARD CHAMBERS, M.D.

Physician to the Essex and Colchester Hospital.

Colchester.

SPONGIO-PILINE.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Having seen Markwick's patent *Spongio-Piline* advertised, I ordered some of it to be procured, and feel bound in justice to state that, it has proved remarkably beneficial as well as comfortable to a patient of mine who was suffering severely from acute bursal rheumatism, affecting several of the joints. I ordered it to be steeped in a warm spirit-lotion and kept constantly applied, and am so entirely satisfied with the result that I venture to recommend its employment to the readers of your valuable Journal.

I have the honour to be, Sir,

Your obedient Servant,

J. C. BADELEY, M.D.

Chelmsford, Dec. 26, 1846.

INHALATION OF ÆTHER IN SURGICAL OPERATIONS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Having now administered the vapour of ether for the purpose of rendering surgical operations painless in a great number of cases, at our Metropolitan Hospitals and at my own private residence, with perfect success, by means of an apparatus invented by myself and Dr. Boott, and now manufactured by Mr. Hooper, of Pall-Mall, &c., permit me, if not encroaching too much on your valuable columns, briefly to state the appearance of the patient when under the influence of the vapour that indicates the proper time for the operation to commence.

As my own operations on the teeth have now become numerous and satisfactory to those medical men who daily witness them, I will not occupy the time of your readers by entering into details.

I am, Sir,

Your obedient servant,

JAMES ROBINSON.

7, Gower Street, Bedford Square,

January 18, 1847.

"At the commencement of the inhalation always allow the patient to inhale the vapour three or four times without closing the nose; the nose being

closed, observe carefully the appearance of the eye, the pupil of which will be found, in most cases, after about a minute's inhalation, to be considerably dilated; after eight or ten more inhalations the pupil will remain stationary and fixed for a period, varying from two to three seconds; it will then turn towards the upper eye-lid. This motion will be repeated several times. If the vapour be continued the pupil will be observed to turn under the eye-lid and remain *fixed*; three or four inhalations more and the operator can commence.

"In operations which are protracted and require any length of time, cut off the vapour by means of the stop-cock attached to the apparatus; permit the patient to breath the atmosphere through the nose five or six times; again let on the vapour, breathing alternately atmospheric air and the vapour of ether, at intervals of half a minute, until within two or three minutes of the completion of the operation, when the pipe, &c., can be removed with perfect safety."

J. ROBINSON.

7, Gower Street.

INHALATION OF ÆTHER IN SURGICAL OPERATIONS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The *Lancet* of January 9th, page 49, publishes a communication from a physician, reinforced by an opinion upon a supposed case, given by a Queen's Counsel, tending to diminish the value of the patent for the Letheon. Will you do me the favour to give publicity to the following answer to that communication?

I am, Sir,

Your obedient servant,

JAMES A. DORR.

London, 18, Duke Street, St. James's,
January 11, 1847.

Reply to the opinion of Queen's Council, published in the *Lancet*, January 9th, page 49.

1st. No counsel can give a client valuable, *or even safe*, advice, as to danger of infringement, who has not read the specification, and does not know the claim of the patent. The patent for the Letheon has been duly sealed, but the specification is not yet made public.

2nd. So far as the general principles of law enunciated go, they confirm the views of the patentees.

JAMES A. DORR.

[We question much, notwithstanding Mr. Dorr's letter, whether such a patent can be sustained, and certainly it ought not to be so. Any particular form of apparatus may without doubt, be made the property of the inventor; but the attempt to place restrictions on the mode of using a known medical agent by qualified medical practitioners, is as absurd, as its success would be mischievous.—ED.]

Medical Intelligence.

OPERATIONS PERFORMED UNDER THE INFLUENCE OF ÆTHER.

The following successful operations, performed under the influence of the inhalation of the vapour of sulphuric æther, have been reported since our last number:—

At Guy's Hospital, by Mr. Morgan, lithotomy, on a country lad; by Mr. Key, on a man aged 26, for strangulated scrotal hernia, with removal of a large mass of thickened omentum.

At King's College Hospital, by Mr. Fergusson, for phymosis, on a man aged 43; for abscess and fistula in ano, in a delicate female aged 26; passing a catheter through a tight stricture in the bulbous part of the urethra, in a man aged 32; removal of warts from the glans and prepuce, in a man aged 21.

At St. Thomas' Hospital, by Mr. Mackmurdo, the removal of a finger, from a child aged 6.

At the London Hospital, by Mr. Adams, amputation of the leg.

At Charing-Cross Hospital, by Mr. Hancock, removal of the nail from both great toes, in a man aged about 34.

At the Westminster Hospital, by Mr. Hale Thomson, removal of condylomatous growths from the labia, in a woman of middle age; for phymosis, in a young man.

At St. Georges's Hospital, by Mr. Johnson, amputation below the knee, in a young man.

At the Queen's Hospital, Birmingham, by Mr. Knowles, amputation of the leg, in a female.

At the Lynn Hospital, by Mr. Cotton, removal of cataract, in a female, and in an old man; of a cancerous tumour of the lip, in an old man.

Operations have also been successfully performed by Dr. Brett, (extraction of a cataract; ptosis;) by Mr. Lawrence, (removal of a tumour from the orbit;) by Mr. Partridge, of Birmingham, (strangulated hernia;) by Mr. Parker, of Liverpool, (for strabismus;) by Dr. J. C. Hall, of East Retford, (removal of a tumour;) by Mr. Rudkin, of Derby, (removal of a sequestrum of diseased bone from the leg;) &c., &c.

Mr. R. Lucas, a veterinary surgeon at Liverpool, has also performed an operation on a Newfoundland dog under the influence of æther vapour; the animal did not evince the slightest sign of suffering.

CAUSE OF DEATH IN STILL-BORN INFANTS.

Dr. King, of Sackville Street, has just submitted to the Medico-Chirurgical Society, an Essay "On the cause of Death of Infants Prematurally Still-born," wherein he insists, that death is not from asphyxia, as hitherto supposed, but from syncope; and proposes an entirely new practice, by which means the still-born infant will be of comparatively rare occurrence.

MEDICAL APPOINTMENTS.

M. Begin has been elected President of the Académie de Médécine, Paris, for the year 1847; M. Bouillaud has been elected Vice-President, and M. Métier, Secretary.

A Medical Lecturer has been appointed at Gonville and Caius College, Cambridge, to direct and superintend the studies of the Medical Students in the College.

Mr. Paget, Mr. McWhinnie, and Mr. W. Pennington, are candidates for the appointment of Assistant Surgeon to St. Bartholomew's Hospital, vacant in consequence of the resignation of the office of Surgeon, by Mr. Vincent.

Dr. Robert Lee has resigned the appointment of Physician Accoucheur to the Brownlow Street Lying-in-Hospital; and Mr. South that of Professor of Surgery to the Royal College of Surgeons.

ROYAL COLLEGE OF SURGEONS

Gentlemen admitted Members on Friday, January 22nd, 1847:—S. M. C. A. A. Smith; G. Goodlad; J. L. Johnston; E. D. Allinson; T. Bridgwater; A. G. Willington; H. G. Grayling; G. R. Skinner; C. H. Dunhill; J. Hyslop; W. E. Hughes; J. Beecroft; C. W. Wray; W. A. Salmon; W. Weston; W. F. Tomkins; T. H. Tanner.

ROYAL SOCIETY.

AWARD OF THE ROYAL MEDAL IN PHYSIOLOGY, FOR 1845.

The following important requisition for a Special General Meeting has been presented by Mr. Wharton Jones:—

We the undersigned, Fellows of the Royal Society of London for improving natural knowledge, do hereby, in conformity with the Statute, chap. xii., § 2, require a Special General Meeting of the Society to be convened, for the purpose of considering and determining on the legality of the circumstances under which the award of the Royal Medal in Physiology for 1845 was first recommended by the Physiological Committee, and under which it was actually made by the President and Council.

T. Wharton Jones.	W. F. Chambers.
James Copland.	John Webster.
Robert Lee.	James Clark.
Richard Bright.	Marshall Hall.
James R. Martin.	Robert E. Grant.

George Gulliver.

January 7th, 1847.

OBITUARY.

Died, January 4th, at Andover, aged 82, Philip Henry Poore, M.D.

January 5th, at Edinburgh, J. Henry Davidson, M.D., one of the Physicians in Ordinary to the Queen in Scotland.

January 6th, at Studham, Herts, Thomas Sweeny, Esq., surgeon.

January 10th, aged 35, J. E. Jones, Esq., surgeon, Gravesend, Kent.

METEOROLOGICAL JOURNAL FOR DECEMBER, 1846.

Kept at Sidmouth,

By W. H. Cullen, M.D., Surgeon.

Mean of External Thermometer at 9 A.M.	36.07
. . . . . 9 P.M.	35.75
. . . the Maxima, ...	41.61
. . . . Minima, ...	30.31
Absolute Mean	36.25
. . . . . of eight preceding years. .	40.56
Extreme highest on the 20th	50.50
. . lowest . . 14th	22.
. . range	28.50
Mean daily range	11.15
. . Dewpoint at 9 A.M.	31.71
. . . . . 9 P.M.	30.61
Mean of Barometer at 9 A.M.	30.045
. . . . . 9 P.M.	30.061
Extreme highest on the 30th	30.701
. . . lowest on the 23rd	28.850
. . . range	1.851
Number of days fine	18.
. . . . . dull	3.
. . . . . snowy	2.
. . . . . on which any rain fell .	8.
Quantity of rain in inches	1.404

PREVAILING WINDS.

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W
20	1	0	1	0	1	2	6

BOOKS RECEIVED.

The Retrospect of Medicine, &c. Edited by W. Braithwaite, Lecturer on Obstetric Medicine at the Leeds School of Medicine, &c. Vol. XIV. July—December. 1846. London: Simpkin, Marshall, and Co. 1847. pp. 455.

The Microscopic Anatomy of the Human Body, in Health and Disease. By Arthur Hill Hassall, F.L.S., &c. Part VI. London: Highley. 1847. 8vo.

A System of Surgery, by J. M. Chelius, &c. Translated from the German, and accompanied with additional Notes and Observations. By John F. South, Professor of Surgery to the Royal College of Surgeons, and Surgeon to St. Thomas's Hospital. Part XV. London: Renshaw. 1846. 8vo.

Ninth Annual Report of the Suffolk Lunatic Asylum. December. 1846. Woodbridge: 1847. 8vo., pp. 29.

A Manual on the Principles and Practice of Ophthalmic Medicine and Surgery. By T. Wharton Jones, F.R.S., Lecturer on Anatomy, Physiology, and Pathology, at the Charing-Cross Hospital, &c., &c. London: Churchill. 1847. Fcp. 8vo., pp. 570.

TO CORRESPONDENTS.

Communications heve been received from Dr. Cullen; Dr. Hastings; Dr. J. Black; Dr. Barclay; Mr. C. L. Prince; Dr. Addison; Mr. R. Reedall; Liverpool; Dr. A. W. Davis; Dr. Seddome; Dr. Wake; Dr. Durrant; A Sexagenarian; The Birmingham Pathological Society; Mr. J. M. Bryan; Mr. Cotton.

Inquirer must attach his name before his communication can be published. The subject of it is very important and requires a full investigation.

PROVINCIAL
MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON CLINICAL MEDICINE.

By W. R. Basham, M.D., Physician to the Westminster Hospital.

Lecture VI.

Case of Drunkard's Delirium, with pneumonia and bronchitis: History of the case; character of the delirium; stethoscopic signs; condition of the sputa; treatment: death; post-mortem appearances.—Tendency of drunkards to collapse; urgency of inflammatory symptoms, when supervening in such cases. Physical signs of pneumonia and bronchitis.—Pathological condition of pneumonia; cause of the rust-coloured sputa; progress of the disease.—Effects of bronchitis, complicated with pneumonia; discretion required in the treatment of such cases.

Gentlemen,—You have been present this day at the *post-mortem* examination of two cases of acute disease of the pulmonary organs, which, though they do not exhibit any uncommon features, are nevertheless of interest to those who are engaged in pathological studies; for every opportunity of making *post-mortem* examinations, affords us the valuable means of either confirming or disproving the diagnosis made during life; and what is still more important, we are presented with a view of the organic processes which constitute the disease, and learn the direction in which those organic changes proceed. The probable fatal or favourable issue of parallel cases is thus more easily determined, and the nature and direction of our therapeutical efforts more clearly defined.

R. H., aged 29, a green-grocer, had been drinking for the last three days, and during that time, in a continuous state of intoxication, was brought to the hospital, on the night of January 5th, at half-past twelve o'clock, by a neighbour. On admission into Burdett ward, he is reported to have presented all the symptoms of a case of *delirium tremens*. His manner was much excited; his answers to questions were hurried and indistinct; there was great trembling of the limbs, particularly of the hands; the tongue was tremulous, was quickly protruded, and as suddenly withdrawn; the mind rambling incoherently on a variety of subjects; the pupils were contracted, and the skin bedewed with a clammy moisture. He was ordered a dose of opium. In the morning, the report book states that he had been very restless all night; no sleep; much excitement and violence of manner; so much so, as to render necessary confinement by the strait waistcoat. Suffers from an exceedingly troublesome and suffocative cough, with frothy sputa, stained with blood. He had been ordered opiate draughts every hour, which he had taken up to the hour of the daily visit. A careful examination of the chest quickly decided that a different and very energetic plan of treatment was necessary. *Auscultation*:—The left side was duller on percussion than the right, and particularly on the mammary and lateral region; throughout the right side the resonance was clearer. On the left side, no respiratory vesicular murmur could be detected; bronchial respiration was everywhere, but especially in the mammary region laterally; respiratory murmur was also detected here, accompanied by some moist mucous gurgling. On the right side, the vesicular murmur was veiled by the presence of bronchial respiration and mucous rhonchi, in the large as well as the small tubes. The pulse was 120, full and elastic, round and compressible; the tongue moist, but furred; the respiration 48; frequent urgent cough; pupils contracted to a point; manner very restless, and much incoherence. With these physical signs there could be no doubt that acute inflammation of the bronchial mucous membrane existed, combined with pneumonia of the left side, probably at the root of the lung.

Here was a fearful combination of evils to contend against,—a drunkard, intoxicated for more than three days, continuously an habitual drinker, suffering from acute pulmonary inflammation. Such individuals will scarcely, under any circumstances, bear depletory measures; nevertheless, in such a case as this, they are imperatively required, and you must be prepared to treat them with the cupping scarificator, and antimony, calomel, and opium, in one hand, and with ammonia and other stimuli, if necessary, in the other. Accordingly this patient was cupped to twelve ounces between the shoulders, a large blister covered the left side of the thorax, and Hydrarg. Chloridi, gr. j.; Opii, gr. j.; Antim. Pot. Tart., gr. ¼, given every four hours. The pulse was directed to be watched; and if, after the cupping, it continued full and hard, a farther amount of blood was to be abstracted.

On the visit the next day, it was reported that the cupping had relieved the breathing and frequency of the cough, that the respiration had fallen from 48 to 40, and that the sputa were still frothy and sanguinolent. The pulse had improved in character after the cupping,

and was neither so full nor so hard as previously; the prognosis of the case, notwithstanding, still continued most unfavourable. At the afternoon visit the state of the chest was similar to that of yesterday; and owing to the blistered surface of the left side, could not be minutely examined. Bronchial respiration, with moist crepitations, were heard posteriorly on the left side; on the right side, mucous rhonchi were heard in each region. The sputa were copious, frothy, and of a more dusky dirty hue than yesterday; the tenacity was not very great, and they did not partake so much of the characteristics of pneumonia as of bronchitis. The pulse was 140, small and compressible; countenance anxious; eyes glazed; pupils contracted to a point; tongue moist; odour from the body offensive and cadaveric. The symptoms continued thus till the evening, when he changed, became comatose suddenly, the vital powers quickly failed, and he died at seven p.m.

Sectio cadaveris eighteen hours after death. Body well formed; limbs muscular, and rounded by subcutaneous fat. On opening the cavity of the chest the lungs did not collapse, but were adherent to the pleura costalis by firm attachments of fibrinous tissue; no evidence of the formation of recent plastic exudation: the right lung was dense and gorged, but crepitated throughout on pressure, and floated in water; no trace of fibrinous exudation could be detected in any part of this lung; when squeezed a white frothy fluid oozed out from innumerable openings of the more minute bronchi: the left lung crepitated only at its apex and the inferior margins; the central parts felt dense and carnified; its condition was such that it easily tore or broke down into a granular mass, and it did not float in water; this portion of the middle lobe was of a dark-brown, red, dirty colour, it constituted an example of lobular pneumonia in the second stage; the central portion of the hepatized mass was softer than the circumference, and appeared to be passing into the stage of purulent softening. Submitted to examination under the microscope granular corpuscles and blood-discs were alone observed; in some few of the former acetic acid developed central nuclei. The mucous membrane of the trachea exhibited a fine bright-red capillary injection; passing into the right bronchus the colour became more of a madder hue; and in the smaller ramifications of the tubes in this lung of a still more dusky appearance. The left bronchus exhibited much the same condition as the right; but the mucous membrane of the subdivisions had here become of a purple tinge, which colour was maintained even into the hepatized mass. The liver was much enlarged; its inferior margin extended to within a quarter of an inch of the umbilicus; a section exhibited a bright, sienna-orange colour; it had also a granular appearance; no evidence of portal congestion; under the microscope it presented innumerable fat vesicles; its weight was ninety-two ounces. The kidneys were healthy, presenting evidence of venous hyperæmia; right kidney weighed five ounces and a half; left kidney six ounces and a half. The brain presented no aspect of disease; its weight was forty-six ounces.

A prominent feature of interest in this case was the complication of acute pneumonia, with a condition which, if not strictly *delirium tremens*, was closely allied to it, being a state of great physical and constitutional disturbance brought on by the inordinate use of intoxicating liquors. The effect of alcoholic stimuli in excess, is at first to produce great cerebral excitement, with exaltation of the circulating powers; to this invariably succeeds a state of great prostration, and extending in some cases to collapse,—in fact, a failure of the powers and functions that have been thus unnaturally excited, is the usual characteristic of the drunkard's excess. Now, in the case under consideration, superadded to this dangerous tendency to prostration and collapse, were unequivocal symptoms of intense pulmonary inflammation, requiring the most energetic measures, and the unhesitating use of agents, which, without this pulmonary complication, the pre-existing state of the patient would most emphatically forbid. The prospect of a favourable issue was from the first extremely limited, for the pneumonia of drunkards is specially a fatal disease; they are proportionably more prone to the disease, and in them its progress is unusually rapid and uncontrollably fatal.

On approaching the bed-side of this patient on the morning after his admission, you witnessed his hurried and alarmed looks,—his restless, yet vacant gaze on those around his bed,—a certain amount of incoherence in his words, yet sufficiently conscious to protrude the tongue when asked; this organ quivering, furred, white and moist; the pupils contracted; and the hands, when released from the strait waistcoat which his violence rendered necessary, agitated and tremulous. He coughed frequently and had no sleep. You could not fail to recognize these as the expressive symptoms of the drunkard's disease; and inquiring no farther, you might have imagined that opium and ammoniacal stimuli were all that this case would require. But in the investigation of a case you must carry your inquiries beyond those limits which the eye merely reaches, the senses of hearing and of touch must lend their aid, and by them you must satisfy yourselves that no complication exists,—no lurking mischief in deep-seated organs, working insidiously to a fatal termination, while you have been busy only with those symptoms that lay on the surface, and are most easily and obviously detected. Here the respiratory movements of the chest were so much accelerated, that even without the stethoscope, pulmonary disease was to be suspected.

On carefully examining the chest, first by percussion, the left side was duller than the right, and this dulness was specially in the mammary and lateral region; on the application of the stethoscope over this spot, bronchial respiration, with a dry crepitating murmur was heard. The presence of bronchophony, and the total absence of any vesicular murmur, convinced me that the central portion and probably the root of the left lung was the seat of the inflammation. Superiorly and in the axilla of the left side, mucous rhonchi of small bubbles veiled all other respiratory sounds. The resonance of the right side was not much affected, but the mucous gurgling was heard in every region. This

physical state of the chest indicated the presence of broncho-pneumonia,—pneumonia situated probably at the root of the left lung, and an inflamed state of bronchial mucous membrane throughout its entire extent, the intensity being greatest in the smaller tubes; and I formed this opinion upon the absence of any moist gurgling of large bubbles being heard in the regions where the presence of secretion in the larger tubes is most readily detected—namely, posteriorly between the scapula, and anteriorly in the mammary region. The character of the sputa corroborated to a certain extent this diagnosis. They were copious and much was of a pure white frothy aspect, without much tenacity; but a portion was also frothy and somewhat rust-coloured, and this portion was more tenacious than the rest. Now, the pathological conditions on which these phenomena depend are these:—In that portion of the lung in which pneumonia exists, a retardation or stagnation of the blood in the arterial capillaries first takes place; what is the primary cause of the retardation or arrest to the even current of the capillary circulation, is not known or even likely to be. All that we can attain to is a knowledge of the conditions of any given phenomenon; the causes of those conditions are among the impenetrable mysteries of nature, and it is a useless expenditure of time speculating or guessing at it. All that we can state with certainty, is, that the earliest change observed in the capillary vessels of a part, the seat of inflammation, is a stagnation of the blood-corpuscles; their onward progress is arrested, and as an effect of, or concomitant with, this diminished motion, is the escape of a fibrinous spontaneously-coagulable fluid, which, filling the surrounding interstices of the tissue, consolidates the part, and gives firmness and solidity to what was previously elastic and extensible. In the pulmonary parenchyma this exudation not only fills the bronchial intercellular passages but the air-cells also. This accounts for the denseness and increased specific gravity of a portion of inflamed lung; and it also explains the presence of the dry crepitating sound on applying the ear to the region immediately over the seat of inflammation. This fibrinous exudation, the special product of capillary hyperæmia, contains dissolved in it much of the hæmaphein of the blood; its presence gives to the inflamed part the dark brown-red colour always observed in the first stage of pneumonia. A portion of this colouring matter, (hæmaphein,) dissolving and mixing with the bronchial mucus, tinges that fluid, a brown, red, or rust colour, and when expectorated presents us with the sputa so familiar in this disease. This constitutes the first stage of pneumonia. The next stage is the softening or breaking down into a purulent degeneration of this fibrinous deposit. In the case before us this condition had scarcely commenced, as the granular state and colour of the part testified, for as softening proceeds, all the hæmaphein of the blood is absorbed out, and a grey cheesy mass is left. When examined under the microscope only a few corpuscles that developed nuclei by the action of acetic acid were observed, the mass being composed of granular exudation corpuscles.

Now, it was not pneumonia only that the stethoscope detected; the other physical signs implied that the bronchial mucous membrane, especially in the smaller tubes, was in a state of inflammatory congestion. The *post-mortem* examination confirmed this, and exhibited to you morbid complications not unusual in the pneumonia of drunkards. The immediate cause of death in these cases is asphyxia, or death beginning at the lungs. The accumulated secretion of mucus in the air-tubes as effectually obstructs the passage of oxygen to the blood as any other asphyxiating agent; and when such conditions exist, coma usually for some hours precedes death. Venous blood continues to circulate till the patient dies literally "*poisoned by his own blood.*"

Many circumstances in this case co-operated to bring on the fatal issue. In the first place, the inordinate use of intoxicating drinks at all times tends to the creation of an inflammatory diathesis. Again, the season of the year, and the particular condition of the atmosphere—frosty, foggy, with a very elevated barometer, most unquestionably predispose the lungs to become the seat of inflammatory action. You daily witness, among both out and in-patients, how the season of the year predisposes to pulmonary disorders. Many circumstances co-operating, a series of morbid effects followed, from which it was not reasonable to expect that the patient could survive. I have already had occasion oftentimes to remark to you, that the co-existence of acute inflammatory action, with a general adynamic condition of the system at large, is by no means rare. It is this antagonistic state of things that for the most part renders inflammatory diseases fatal; for if the powers of the system be sufficient to permit those remedies to operate, which only can arrest the progress of inflammatory action, all may do well; but if the powers of life be low, these measures often add to the prostration, while they fail to check the advance of inflammation. Nevertheless, in such cases they must not be neglected; and indeed it is not unfrequently necessary to cup, blister, and give mercurials with one hand, while the system is supported by ammoniacal stimuli with the other.

The treatment of these cases requires great discretion. To bleed from the arm is not advisable; rapid subsidence of the vital powers often follows abstraction of blood from a vein. The most effectual and least hazardous mode of relief is by cupping between the shoulders, or over the affected side. Blistering is also desirable. Calomel, antimony, and opium, should be cautiously administered, and ammoniacal salines given at intervals the moment the pulse, by its softness, indicates their necessity.

I wish to direct your atttention to the case which died in the same ward on the same day,—one also of pulmonary disease; but an emphysematous state of the lungs, with chronic bronchitis, were the characters determined by the stethoscope, and at our next lecture I wish to point out to you some of the chief distinguishing features of that case.

THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(*Fourth Series of Experimental Researches.*)

By William Addison, M.D., F.R.S., Malvern.

II. Animal Textures.

It may with great certainty be affirmed, that the blood contains the elements from which, in animal structures, the solid textures and the secretions are produced. Blood consists of a limpid fluid, holding in suspension a multitude of cells of two kinds; the one red, the other white or colourless; it may therefore with propriety be termed a *cellular or corpuscular fluid.* On its first discharge from the living vessels, blood is thin—that is to say, it drops like water, but it speedily becomes viscous or stringy, and then coagulates into a soft solid, which ultimately separates into two parts,—a red clot, and a yellow fluid serum. But blood, before it coagulates, frequently separates into two fluid portions; the uppermost colourless, and termed plasma, lymph, or liquor sanguinis, the lower red: both these portions coagulate, so that the solid clot is in part colourless, and in part red. The colourless part of the clot, which is uppermost, and formed by the coagulation of the plasma or lymph, is a coherent and elastic fibro-cellular texture, ordinarily termed the *buffy-coat;* it is usually depressed in the centre, with thin fibrous edges, and there is frequently a viscous, colourless, gelatinous mucus in the cup-like depression, that may be drawn out in strings like ordinary mucus.

The microscopic appearances in a film of blood *not* disposed to exhibit a colourless layer of lymph or plasma, are very different from those of a film of blood that *is* disposed to do so. In blood *not* disposed to exhibit a buffy-coat upon the clot, we see with the microscope numerous red corpuscles or cells, slightly cohering in strings and rolls, and a few colourless ones floating in a clear limpid fluid. In blood that *is* disposed to have a buffy-coat upon the clot, we see a much larger proportion of colourless cells, and multitudes of minute molecules floating with the red cells in the clear and limpid fluid; the red cells adhere more firmly to each other, and are congregated in larger and more irregular masses; and in the fluid, a network or tissue of interlaced filaments or fibrils is shortly observed to form. If a film of the colourless fluid, plasma, or lymph, be separately examined with the microscope, we find it mixed with innumerable colourless cells and isolated molecules; within the cells are a number of similar molecules, some of the cells containing much larger ones than the others; and when the coagulation commences, it is by the formation of fibres in the fluid. When water or a weak solution of potass is added to colourless blood-cells, they immediately begin to enlarge, gradually swell out to double their former size, and then burst open, discharging their contents, which consist of a viscous mass, mixed with molecules, and apparently identical in all its properties with natural or healthy mucus.

All the mucous secretions and the saliva contain colourless cells, which cannot be distinguished by any specific character from the colourless cells of the blood, and there appears no reason to doubt that the viscous matter of these secretions is an animal product elaborated in the interior of cells identical with those which are seen floating or mingled with it. Moreover, both mucus and saliva readily form fibrils or fibres when acted on by appropriate agents. These and several other well-known phenomena observable in the animal secretions may be treated of analogically, with a view to ascertain the origin of the fibrillating elements of the plasma, or lymph of blood, the element to which its coagulation into a coherent fibrous or fibro-corpuscular texture is due. Milk, among others, is a complex animal secretion, elaborated in the interior of cells or corpuscles, and set free by the thinning away, dissolution, or rupture of the cell-wall. The yolk of an egg is an analogous example, where the cells are large, and their walls so very thin, that it is with the utmost difficulty they can be touched in the gentlest manner without rupture. To the unassisted eye, milk appears as a homogeneous, white, opaque, fluid; through the microscope its white appearance and opacity are found to be owing to myriads of minute molecules,—and it is well known to contain an oily element or *butter*, a fibro-albuminous element or *curd*, and a limpid fluid or *whey*, and to the sum of each of these products every milk-cell contributes its quota.

The plasma, lymph, or colourless element, floating on the surface of newly-drawn blood, appears to the unassisted eye, when first seen, as a semi-transparent colourless fluid, gradually becoming viscous, and then fibrous and solid; and it is well known to contain, not only the solidifying fibrous, but a soluble albuminous and oily element. There are then the very same reasons for concluding that the fibrinous and albuminous elements of the blood, plasma, lymph, or liquor sanguinis, are derived from colourless cells similar to those found in it, as there are for concluding that the elements of milk, saliva, or any other complex animal product, are derived from cells; and the plasma or lymph of blood, therefore, is as much entitled to the term *secretion*,—to be considered as the products of cell-elaboration, as any of the other fluid or solid materials of the structure.

An abundance of colourless cells, filled with a viscous matter and molecules, are at all times discharged or thrown off, mixed with a viscid mucus, from the mucous membranes, and their numbers are increased upon the slightest irritation or inflammation. Similar cells are at all times discharged or thrown off

from all wounded and healing textures, where the process of reparation is going on—where new and conformable elements of growth are appearing, and where, therefore, the process of nutrition is normal. Similar cells are also discharged or thrown off from diseased textures, ulcers, and abscesses, from scrofulous joints, and from the cavities of the lung in consumption; in these latter instances more especially the cells have received the distinctive appellation of PUS.

Pus varies in consistency: it may be nearly solid, or quite fluid,—that is to say it may be solid enough not to drop like water, and in this state it is a *corpuscular texture*, analogous to the incoherent corpuscular textures of the lower forms of vegetation, and the green parenchyma of a leaf. Recently excreted pus displays under the microscope an abundance of colourless cells, the interior contents of which, in various states of elaboration, present various appearances. Old pus has a different microscopical aspect, which it is well should be remembered in considering the origin of tubercles, consisting chiefly of minute molecules and granular matter, resulting from the breaking down of the cell-walls. The cells or corpuscles of healthy or recently excreted pus vary in magnitude and appearance; active molecules are frequently visible in their interior, and when water, or a weak solution of potass is added to them, they swell, burst, and discharge their contents, consisting of a viscous matter mixed with molecules.

No wounded, irritated, or abraded texture, heals or ulcerates without the presence of a greater or less abundance of incoherent colourless cells; and there are no certain, specific, distinguishing marks between the colourless cells of blood, lymph and pus. When, therefore, a healing wound discharges pus, it can be regarded in no other light than as indicating a superabundance of nutritive cells, which from an actual excess in number, or some other cause, do not meet with the conditions required to make them deliver up their contents, and take part in the metamorphoses required for the reparation of the texture; but when an ulcerating wound (where there is no reparative process at all,) discharges pus, it would appear in that case, that all the cells from some inherent defect have lost the power of a conformable metamorphosis.

This explanation of the appearance of colourless cells, both in healing and ulcerating textures, implies in the former case a great excess of agents in the performance of a specific office or function—viz., the healing of the wound, and this so far from being, as might hastily be imagined, contrary to, is in fact quite in accordance with, the usual plan of nature as observed in other things, and in analagous instances. The pollen-cells of vegetables, for example, have an important and specific function, and in what apparently excessive abundance are they produced. Of the myriads of pollen-cells discharged from the anther, how few are actually expended in the fertilization of the embryo, compared with the myriads which *seem* to be wasted. In animals the analogous fact, too, may be produced in illustration. Again, in the repair of a fractured bone, what an apparent excess of nutritive material or *callus* is collected for the cure, which is subsequently removed when the fractured extremities have been united. Moreover, there are other facts in surgery pointing to the same conclusion; for healthy granulations, copiously discharging what is called healthy pus, heal rapidly by moderate and regulated pressure, which by diminishing the amount of blood flowing through the innumerable vessels of the young texture, diminishes also the amount of colourless cells, whereupon the quantity of pus diminishes, and the granulations then becoming covered with a coherent, fibrous, nonsecreting, instead of an incoherent, corpuscular, secreting texture, are said to cicatrize or heal. Colourless cells, therefore, in all cases of nutrition, appear as the primary and active agents, the results depending upon their metamorphosis.

From these facts and observations, and from others fully detailed in former researches, I draw these important conclusions:—

First, that in all living structures,—in all plants, and in all animals, the elements of growth and secretion,—that is to say, the peculiar and characteristic solid and fluid matters of the structure, are prepared or elaborated in the interior of minute vesicular bodies, variously termed corpuscles or cells, which may either be coherent, forming a strong or solid texture, or incoherent, forming a soft or brittle, and more or less a fluid one; and that the elaborated material, when set free by the opening or rupture of the cell-wall, undergoes ulterior changes, or metamorphoses, and either constitutes a part of the solid structure, or remaining fluid forms a secretion.

Secondly, that the incoherent cells of the parenchyma of the leaf are the primary elaborating cells of vegetables, and the incoherent cells of blood, the primary elaborating cells of animal structures. By the metamorphosis of the former, all the subsequent textnres and vegetable colours and secretions are produced; and by the metamorphosis of the latter, all the animal textures and secretions. The incoherent parenchymatous cells of the leaf are in all their stages stationary; and the air necessary to their respiratory functions passes to and fro around them by the motive power of heat. The incoherent protoplasma cells of blood flow in streams throughout the body, traversing in their course the walls of the coherent cellular and aeriferous texture of the lung, into and out of which the air passes by the motive power of muscles.

Thirdly, that the relations subsisting between animal textures or secretions, and the blood, are analogous to those subsisting between vegetable textures or secretions, and the leafy parenchyma; *and therefore that the*

law of the morphology of animal, must be analogous to that of vegetable, structure. In the latter instance, the doctrines based upon the law do not profess to give any reason why the parenchyma of one leaf differs from that of another,—why oil of peppermint is formed or secreted in one set of green cells, and prussic acid, opium, or bergamotte, in another; nor does it enter upon the question of the differences prevailing among the green granular cells of different parts of the same plants: on the contrary, the doctrines trace the form and mechanical properties, rather than the physiological function of the textures; so that the main features of morphology are only secondarily affected by differences and variations in secreted products. So likewise it appears to be in animal textures, that the morphology, in respect of form, is a branch of physiology sufficiently distinct from the morphology of secretion; and to admit, as is the case in plants, of a separate consideration.

"If we consider," says MOHL—and he is speaking of the cells of plants—"the place at which, in the interior of a cell, new cells are on the point of being formed, and at which the nuclei have already made their appearnace, we find that the future mother-cell contains *a viscous colourless mass, mixed with minute granules;* and since this viscous mass everywhere precedes the first solid formations, I trust it will be considered justifiable, if I propose to designate it by the word *protoplasma*, a term which recalls to mind its physiological function.*

Now it is evident, in the universally-existing process of cell elaboration, and whether the result be new cells, or permanent, cellular, or fibrous structure, or fluid secretion, that two distinct stages are recognised. *In the first*, the elaborating matter,—the *protoplasma* or primary element, (adopting the term proposed by MOHL,) is in progress of preparation within the cell, shut out from all extraneous or exterior agents, except those specially admitted through the cell-wall to assist in the elaboration. *In the second*, the elaborated matter having been set free by the opening or rupture of the cell-wall, undergoes its ulterior metamorphosis, subject to the action of new agents, which may influence conformably or unconformably, the completion of its permanent phase.

The liquor sanguinis or lymph which rises to the surface of newly-drawn blood is, if we adopt MOHL's term, the *protoplasma* of animal structures, and the buffy coat, is a *protuphasma*, a fibro-corpuscular texture, which, were it still within the vital influence of the whole structure, would, according to its analogies, become a secreting texture; and, moreover, the mucous or jelly-like matter often found in the depressed centre of the buffy coat is, in reality, the last change or secretion of this altering cell-texture.* "The glairy fluid termed mucus, being nothing more than an altered state of the fibrillating liquor sanguinis, the change from the one to the other being coeval with the changes within the cells. Hence, if we take the red portion of the buffed clot, and the red cells to represent blood, then the colourless layer of liquor-sanguinis (*the protoplasma,*) will represent the first remove from blood, and mucus or pus will be next; and it would appear, generally, that the nearer the cell is to, or the fewer the stages of its removal (*by morphological changes,*) from, the circulating current, the more nearly it resembles the colourless blood-corpuscle, and the more decidedly and visibly its fluid contents, when they escape, fibrillate; whereas, the further the cell is, or the greater the number of stages of its removal (*by morphological changes,*) from the circulating cells, the larger it is, and the less perfectly do its fluid contents fibrillate."†

"The blood can hardly be said to be organized, yet from the physical characters of coagulated fibrin, it is evident that while circulating in the body it holds a peculiarly endowed animal principle, (fibrin,) requiring only a moments rest to constitute solid, organized (I do not say vascular,) tissue. The texture, formation, cohesion, toughness, and elasticity, are all proofs of its organized nature; and it at once, without further aid or assistance, assumes all these properties, even after its removal from the body in venesection, or after death in its own vessels. There seems then, to be but one step between the microscopic capillaries and the fibrin of the blood; the former are minute fibrinous channels, the latter may (not inappropriately,) be termed *organized tissue, circulating with the blood.*" (*Medical Gazette*, March 26th, 1841.) These are sentiments expressed upwards of five years ago, and subsequent researches have confirmed *the idea* I then entertained. The term 'fluid texture,' may be objected to, nor can I contend for the congruity; but this does not alter the fact that the blood is a *cellular fluid*, and a clot of blood a *fibro-cellular* texture. The incoherency or brittleness of the lower portion of the clot is owing to the predominence of cells; the coherency and toughness of the upper part to the predominence of fibres.

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* See MOHL's paper "On the Circulation of the Sap in Plants," in the "Annals and Magazine of Natural History," July, 1846. (Translated from the *Botanische Zeitung* for Jan. and Feb, 1846.) This author objects to the term *mucilage*, employed by Schleiden to designate this substance, as the term "vegetable mucilage," in the sense in which it is ordinarily used in chemical works, conveys a totally different meaning. The protoplasma of MOHL is termed "plastic element" in my "Researches," &c.

* *Prot-aphorismus*—the mucus having the same relation to the solid fibro-cellular texture that the *protoplasma* has to the incoherent cells of blood.

† "Second Series of Experimeutal Researches," p. 16, &c.—Churchill; London.

(To be continued.)

A CASE OF FATAL PHLEBITIS OF THE INFERIOR VENA CAVA, WITH REMARKS.

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(Read at the Manchester Medical Society, Jan 6, 1846.)

Martha Wright, aged 26, unmarried, a domestic servant, but who, from the history of her habits, had led somewhat of a wandering and irregular life, was admitted on the 14th of August, 1846, into the Union Hospital, labouring under sub-acute rheumatism of the fibrous character, attended with simple derangement of the stomach and bowels. She was forthwith confined to bed, put upon low diet, and the Vinum Colchici, with Nitre in Julep of Acetate of Ammonia was prescribed for her.

On the 17th, she had, in addition to the above, which was then given in intermittent doses only, a pill every night, of calomel and antimonial powder, two grains of each, along with half a grain of opium.

On the 20th following, from her complaining of a pain in the right hypochondrium, she had a blister applied, and her pill was given in the morning as well as at night.

Under this treatment she was entirely relieved from her rheumatism; and on the 24th, the *colchicum mixture* was omitted, as well as her pill in the morning. She was then considered so far convalescent as to be permitted to leave her bed during the day. On the 27th, her pill at night was also omitted, from her gums becoming a little tainted by the mercury, and she had simply at bed-time, a small dose of *Dover's powder*, along with generous diet daily.

On the 4th of September, she was seized with the diarrhœa that, more or less, prevailed at that season as an epidemic, for which she took the *cretaceous mixture*, and from the complaint being rather persistent, she was again confined to bed, and on the 10th she had a pill every six hours, composed of the *diacetate of lead* and opium, which soon relieved the urgency of her symptoms.

Within the subsequent four days, her diarrhœa had entirely ceased, but along with its cessation, her abdomen began to be very tense and painful, and scarcely allowed the least pressure of the hand. In spite of large emollient poultices, and cooling saline medicines to act upon the kidneys, the swelling and tension continued to increase, with much restlessness and pain.

The case having by the 17th put on a very important and serious character, it was more strictly investigated, and the conclusion then arrived at was, that it was one of rapid and diffuse peritonitis, of an adynamic nature, with effusion into the cavity of the abdomen. This result was supposed to be occasioned by the quick stoppage of the diarrhœa, and the repellent effect of cold, while attempting to go about at the time she was constitutionally influenced by mercury; she was besides of a delicate frame of body, and I had some reasons to think that she had been previously intemperate. Her skin was at this stage warm throughout; her abdomen rather hot to the hand; there was thirst, little urine, the bowels were nearly regular; her tongue clean, but dryish, and her pulse small, frequent, and irregular; she, however, had no cough nor dyspnœa, nor could any *bruit* be heard in the region of the heart. I may also mention, that though her lower limbs were disposed to œdema since she came into the hospital, yet, at this period, the 17th, they had become much infiltrated up to the hips, though they retained their natural warmth. Considering the general debility of her system, it was not thought expedient to apply even leeches, but her saline diuretics were increased, along with half-ounce doses of the bitartrate of potass every second morning, and the constant application of emollient cataplasms and oily liniments.

By these means, the indications that were in view, of promoting a safe hydrocatharsis, and an increased flow of urine, were fulfilled, but there was no amelioration to the increasing tumefaction and tension of the abdomen, and to the swelling of the thighs and legs. In addition to the enlargement, which was early evidently owing to a fluid, from the very characteristic fluctuation elicited, there was by the 24th, observed all over the anterior aspect of the thorax and abdomen, well-marked enlargements of the epigastric and external mammary veins, both of which sets of vessels were perceived to inosculate freely and directly with each other.

This appearance in a few days became still more evident and interesting; the main branches became larger than swan-quills; and in passing the finger across the tract of many of them, a perceptible depression was felt, equal to the depth of half the cylinder of the respective veins, while they became full and distended below, and relaxed above the point of pressure. Some internal obstruction to the return of the venous blood to the heart from the lower parts of the body was now evident, but on what it depended was a problem not easy to resolve. No tumour had been detected nor even suspected in the abdomen during her period of diarrhœa, and nothing could be elicited from the chest or heart that could account for this sudden enlarged and vicarious venous circulation. The only conclusion that was come to at the time was, that the rapid effusion into the abdomen, along with the tensive resistance of the parietes, had acted as a counter pressure on the abdominal cava, and so impeded its transmission of the blood from the inferior parts of the body. With this view our medicines were continued, along with the Linimentum Hydrargyri et Linimentum Camphoræ, and calomel with a little opium was readministered on the 27th.

The disease, however, suffered no remission; for though the bowels acted freely when required, and the urine was kept to a normal amount of excretion, with a diminution of the tension and pain in the abdomen, yet the amount of effusion seemed to increase with more encroachment on the capacity of the thorax; the anastomosing veins continued enlarging, and the vital forces of the body and powers of the mind evidently began to give way under the incumbent affliction.

On the 8th of October, regular medicines were omitted,

and only extemporary anodynes and diuretic carminatives were given, along with strengthening broths, and a little gin daily. By these dietetic and negative medicinal measures, the patient struggled on till the 19th, when it was thought expedient to attempt to give her a little relief by paracentesis, which was performed by Dr. Francis, and sixteen pints of clear amber-coloured serum, without any flakes, were taken away, leaving a considerable quantity still unevacuated in the abdomen. Nothing but very temporary relief was the result of this measure, and our poor sufferer departed very quietly on the 21st of the month.

Post-mortem on the 23rd. The trunk, neck, and upper extremities of the corpse emaciated; abdomen not conspicuously enlarged, but discoloured; and the thighs and legs were much distended with serous infiltration. The large anastomosing veins on the anterior aspect of the body had nearly disappeared. The *lungs* were healthy, without pus or tubercles; the right lung adhered a little to the costæ, by an old band of adventitious membrane, while the left was posteriorly condensed, seemingly from moribund congestion. The heart was natural, only the right ventricle was less than the left; the valves were normal; the inner surface of the right auricle, and the corresponding ostium, with that of the base of the pulmonary arteries were much stained on the depending half by supposed imbibition; there were about four ounces of coloured red fluid in the cardiac sac. The *liver* was somewhat enlarged, obtuse at its margins, and slightly uneven over its peritoneal covering; on section it was very buffy, with the light-coloured element of the organ, or of the acini much hypertrophied, while the interlobular tissue was hyperæmiated. An encysted depôt of thick creamy pus, about two inches in diameter, was found in the posterior and upper part of the viscus, nearly on a line over the track of the inferior vena cava, and close to the hepatic vein; the sac seemed a little dense in its walls, and its interior was villous and soft. The *kidneys* were normal, but hyperæmiated, and a urinary cyst was in the lower end of the left one, and its dark sanguineous condition might have arisen from *post-mortem* gravitation, or from retrograde congestion from obstruction in the cava inferior. The *stomach* and *intestines* were much distended with gas, and had a dark grumous magma throughout the whole tube to the caput coli. The interior coat was thin not villous; in some places of the ileum it was uneven, but no ulcers nor cicatrices were observed. There were about four pints of yellowish limpid serum in the peritoneal cavity, but the lining membrane was natural, with the exception of some suffused and arborescent patches of capillary blood. The *bladder* was empty, and the *uterus* was natural, with the ovaria dense and enlarged.

The *vena cava inferior*, from the opening in the diaphragm to its junction, within a short space, with the iliac veins, was filled with irregular lymphous coagula and shreds, which adhered firmly to the inner coat of the vessel, and were connected with similar deposits in the azygos, renal and lumbar veins, but not to the same extent. Pus was found lodged in several of the upper parts of the vena cava inferior, but especially where it passed under the liver and just through the diaphragm. The right ovarian vein was much enlarged and somewhat tinged with blood; so was the left renal vein. The whole condition of the caval vein thus disclosed, very plainly showed that the returning amount of blood through the vessel must have been for some time previous to death much interfered with, if not totally obstructed.

In making my remarks upon this very interesting case, we may first consider the history of the patient before death, and I am sorry I have not kept a more detailed account of her consecutive complaints. We have next to exercise our pathological reasoning after inspection, as to the morbid sequences, and to see if we can trace anything like cause and effect to have existed among the several lesions.

Little or nothing definite was ascertained concerning our patient before admission, except that she had been leading a rather irregular life, and had been discarded by her near relatives, and from her own account she had for some time been complaining of the same ailment for which she was admitted—namely, rheumatism.

When first prescribed for, this disease had a sub-acute form, from which in about thirteen days she was wholly relieved, with her gums very slightly affected. Diarrhœa then set in in a very persistent form, and from the tormina and discharges there was some fear of ulceration, the remains of which, if it had existed, were not, however, observed on *inspection*. In a fortnight afterwards she was also relieved from this complaint, when the swelling, pain, and tension of the abdomen made their sudden and unexpected appearance. There was a probability that the diarrhœa was occasioned by an impression of cold while she was going about in the ward with her system not free from mercurial influence; but how this third and novel phase in her disease was occasioned was not so easily accounted for.

The first explosion of the entirely new symptoms suggested to us that we had to do with a case of sudden and diffuse peritonitis in a cachectic subject, attended with early effusion. In this view we thought ourselves supported by the pain and great tenderness on touching the abdomen, accompanied as they were with increased heat of skin, thirst, and a more frequent yet small and thready pulse. It was also assumed that the attack might have been accelerated, if not occasioned, in a constitution of so much mobility, by the cessation of the diarrhœa, a fuller diet with wine, and also having suffered a fresh accession of cold.

At this time she had long ceased to complain particularly of any pain in her right hypochondrium, for which a blister had been applied on the 20th of August. In the view then, of our patient being now affected with diffuse peritonitis, but occurring in a very asthenic subject, she was treated accordingly, but with no other result than a mitigation of pain and tenderness, while

the abdomen and lower extremities continued to swell, with increasing exhaustion of the whole system.

On observing the growing anastomoses and enlargement of the abdominal and mammary veins, our views of peritonitis became modified, for it was evident there was some obstruction in the abdomen to the due return of blood to the heart. This diversion of blood to the periphery of the trunk was at first attributed to the counter-pressure of the abdominal effusion, so rapidly generated under great resistance from the enclosing parietes, on the inferior cava and renal veins, and beyond this we had no farther data for speculation, as the patient had no ulcers nor varices in her legs, nor had she been for some time previously parturient. Our diagnosis at length became more doubtful, and I may say subverted, when on paracentesis the effused fluid was found limpid, without any shreds, flakes, or albuminous granules, while it was observed, subsequently to the operation, that the enlarged anastomosing vessels in the outward integuments did not in any marked degree subside. The case was thus left for an opportunity of nature revealing her own secrets and operations.

It will be seen from the record of the *inspection*, that the principal lesions worth notice were found in the purulent cyst of the liver, and in the vena cava, for the length of about six inches below the diaphragm, consisting of adherent shreds and plugs of lymph, along with coagula, extending into the renal and lumbar veins, and scattered depôts of pus, but especially where the caval vein just entered within the tendinous pillars of the diaphragm, and was joined by the hepatic veins. It was now evident that there were sufficient appearances in the state and contents of the vena cava to occasion most serious, if not total obstruction to the returning current of the blood, and that such obstruction was the cause of death. The important question, however, arises,—What occasioned this mortal affection of the vein? Was the lesion independent in its origin, uninfluenced by any previous affection of the bowels? or was it caused by sympathic phlogosis with, or on actual absorption of pus from, the cyst of pus in the liver? Considering how seldom veins do inflame or suppurate in the absence of injury to themselves or their branches, or of any focus of pus within reach of their circulation, and also considering the near allocation of the hepatic cyst to the portion of the vein that was most affected, which exhibited pus very similar to that in the cyst, it must be inferred that there was an intimate morbid connection; and the question is,—Which was the primary lesion that stood in the relation of cause to an effect? The density of the walls of the purulent cyst, and its appearance of some chronicity, compared with the filamentous and shreddy condition of the lymph, mixed with interrupted cysts, in the vein, and its purulent exudations of interspersed pus, which, at the upper part of the cava was to the extent of two to three teaspoonfuls, led to the inference, that the lesion of the vein was posterior to the formation of the purulent cyst in the liver, and that the phlebitis of the cava, was, moreover, either caused by pus being transmitted from the cyst by the hepatic veins, or by mere proximity of morbid action, as the two lesions were in very close collocation of parts.

It may be worth speculation to inquire, how was the purulent cyst occasioned? To fathom its initial steps, the inner surface of the ileum and colon was examined; but beyond what I have noted, no adequate causation could there be placed, whatever abrasion or mucous ulceration might once have existed.

In referring to the history of the case, we find that the patient had been complaining of a pain in the right hypochondrium, for which a blister was applied, on the 20th of August, being about nine weeks before her death. Though this pain was in a short time relieved, and was not specially complained of afterwards, there is every probability, from what was observed in the liver on inspection, that at that period the local phlogosis had commenced in this viscus, that eventually terminated in the purulent cyst. A remote consideration then arises, whether this topical affection of the liver was purely indigenous and original, or was owing to purulent metastasis from some of the other chylopoietic viscera. In the absence of any derangement of the stomach or bowels for the first six days she was in the hospital, beyond those of a simple character, (rheumatism being her chief complaint,) and failing of any exact knowledge of her state of health before admission, we are led to infer that the local phlogosis of the liver was idiopathic, and independent of any metastasis of purulent inflammation, or of absorption of pus from the intestines or other organs, through the medium of the vena portæ.

Taking then, this view of the primary state of the case, and that the purulent cyst in the liver had been slowly forming or of some standing, we have next to consider how the vena cava came to be affected; for the lesion of this vessel and its contents had every appearance of being acute and comparatively recent. The cyst being situate very closely to one of the large hepatic veins, though no ulcerous nor other communication was discovered between these cavities, and from the cyst also being in that part of the liver close to the notch for the vena cava, there seems little difficulty in attributing the lesion of the cava to either a venous absorption of pus from the cyst, or to a radiant irritation and inflammation from it. I should be inclined to assign the lesion of the great vein to the agency of purulent transmission and contamination. We know what disturbance and adynamic phenomema are occasioned by pus getting into the veins, either from purulent ulcers or wounds in the extremities, or from the iliac and hypogastric veins in

cases of puerperal phlebitis, and therefore I need not enlarge upon them,—suffice it to say, as far as our case is concerned, that that part of the vena cava opposite the hepatic veins seemed to have advanced most in the consequential lesions. It was at this spot and immediately below the diaphragm that the most perfect depôt of pus was found, while lower down the pus shaded off intermingled with lymphous shreds and clots, and thence coagula of blood intermixed with fibrinous shreds closely adhering to the inner coat, and irregularly filling the veins, terminated the lesion at the inferior part, to within a short space of the bifurcation.

How far death was specially occasioned by the toxic effect of the small quantity of pus that would thus likely find its way into the general circulation, or from the effects of the great abdominal effusion and œdema of the limbs on the vital and nutrient organs, it may not be easily absolutely to state. That the one lesion materially assisted the other in bringing on so rapidly the mortal event is very probable, as they were severally of a very grave nature. I should however, be inclined to attribute the acceleration of death more to the interruption of the vital and organic functions from the fluid pressure, conjoined with the very probable contamination of the systemic blood by even a small quantity of pus, than to the mere obstruction of the returning blood in the *vena cava*; for the vicarious and collateral circulation by the integumental vessels seemed to have been well established, and there are several instances on record, where this collateral circulation had been observed to go on for a much longer period, and where death was obviously ascertained to be caused by the direct effects of other diseases, as in the kidneys, though almost complete organic or chronic obstruction had been detected in the *vena cava inferior* after death.

Whichever of these several lesions had the greater share in anticipating the fatal issue, the case is very interesting, and as far as my researches have extended is a peculiar one. Instances of obstructed circulation in the cava inferior are recorded by Baillie, Reynaud, Wilson, and Cline;* and also by Rayer, Bright, Cruveilhier, and Dr. Barlow,† in all of which the obstruction was found to have been occasioned by either organic and impervious contraction of the coats of the vessel, fibrinous or bloody coagula, tumours of different kinds pressing on the cava, or from fungoid or medullary deposits in the vessel. I have not been able to meet with any case where *purulent* phlebitis was detected, nor any deposits of pus, either independent or metastatic. In looking over the details of these cases, it is curious to see that the blood in its return to the heart did not always work out for itself the same circuitous route, depending no doubt on the extent downwards of the more or less perfect occlusion of the inferior cava.

In Dr. Baillie's case the returning blood found its way to the heart by the lumbar and azygos veins.

In Mr. Wilson's case, as the obstruction had extended down to both sets of the iliacs, the recurrent blood had worked out a path through the vena pudica into the inferior mesenteric veins, and thence into the vena portæ, through the liver to the heart, a small portion of the cava inferior remaining pervious. Mr. Wilson refers to two similar cases in women dying after delivery.

In M. Reynaud's and Mr. Cline's cases, the vicarious circulation was effected by the abdominal and thoracic veins, as in the case now submitted to the profession.

Dr. Peacock relates a very interesting case in the last volume of the "Medico-Chirurgical Transactions," wherein the abdomen and limbs were much swelled for a month before death, and the patient died of hæmatemesis and hæmorrhage from the bowels. On inspection the liver was found free from disease, but it weighed only twenty-four ounces, though the subject, a female, was 47 years of age. The kidneys were in an advanced stage of degeneration. Coagula filled the cava, from the iliac veins to within an inch and a half from the diaphragm, and at this part the vein was contracted to an impervious ligamentous cord. The spermatic veins were large and firm, and the vena azygos, major and minor, were unusually large. The veins of the integuments of the abdomen were not enlarged, and Dr. Peacock saw no reason to suppose that the epigastric, thoracic, or mammary veins contributed to form collateral channels to the returning blood. No pus was anywhere discovered. He considered the disease inflammatory, but it was not easy to assign its period. He supposed death to have been occasioned by the renal disease.

In Hasse's "Pathological Anatomy," translated by Dr. Swaine, (Sydenham Society,) there is a very full exposition of phlebitis in general, as well as its affecting the *vena cava*; but nowhere is mention made of a case similar to the one above described, or as connected with purulent cysts in the liver. So far as rheumatism has any pathological agency or relation to the disease, there is notice quoted of a case where it seemed to give rise to phlebitis and obstruction in the hypogastric veins of a male. Hasse, however, observes, that "phlebitis from rheumatic affections is less prone to purulent formations than to plastic exudations," though in another part he says, "that in a great majority of instances phlebitis inevitably leads to suppuration."

I may here mention, though I have not noticed any analogous obstructions occurring in the vena cava superior, a very remarkable case of a patient that was presented by Dr. Carson, at the Medical Meeting at Newton, last summer,* after the patient being, with

* Edin. Med. and Surg. Journ., Vol. 43.
† Medico-Chir. Trans., 2nd Series, Vol. 10.

* *Provincial Medical and Surgical Journal*, August 5th, 1846.

much probability, cured of the pathognomonic symptoms, arising from obstruction in the upper cava. The disease seemed to have been well diagnosed, and at the period of exhibition, being twelve months after the sudden and painful attack, the man appeared in robust health. His complexion was, however, of a dark hue, and the veins of the forehead, neck, and upper extremities, and of the anterior trunk, were dilated, while veins as large as a swan-quill proceeded over the anterior part of the chest, to a tortuous cluster of vessels in the epigastrium. From this cluster also ran large veins to the groin, and the course of the blood in all these vessels was, from above downwards, the very reverse to what obtained in our fatal case.

I am afraid that I have enlarged too much upon this single case, but from its variety, if not from its being nearly unique in its special origin, it is presumed it may be somewhat interesting, as shewing the powerful yet ineffectual struggles of nature to overcome one of the most serious spontaneous lesions that can occur in the body. It is also one of those cases that shews us, that the difficulty of a special diagnosis is equalled by the inefficacy of our means of cure or much relief, even provided such lesions were as palpable as they are obscure.

CASE OF HEPATIC ABSCESS COMMUNICATING WITH THE LUNGS.

By John Barclay, M.D., Member of the Royal College of Physicians, Leicester.

A.B., aged 41, Dissenting Minister at a village in this county, first applied to me on the 18th October, 1845. His complexion was dark, his form spare, and his look cachectic. His general health had been good, and he then complained of slight abdominal pain, which was relieved by gentle stimulant tonics. On the 15th of November, he was brought to me much worse. He had had severe rigors and had afterwards spit up half a pint of matter.

Nov. 21st. I saw him at home with the surgeon who had attended him. The auscultatory signs were quite natural; there was no dulness, no resonance of voice, no moist sounds anywhere to be heard, and both lungs expanded properly. He continued to expectorate a very large quantity of most offensive pus, which came up in mouthfuls. From all the symptoms, I formed a diagnosis of an abscess in the liver, communicating with the lungs through the diaphragm. I put him on a tonic plan of treatment, and bid him hope, as it was *not* "consumption."

December 11th. I saw him again at home. The emaciation was now extreme; the expectoration continued in large quantity, and most offensive. Though his friends had all given him up, I continued firm in a favourable prognosis, as by another carefully-conducted examination I could detect no lesion of the lung; and from this day he began to improve. He rapidly gained flesh and strength, so that in April and May, 1846, he was able to resume his duties and preached frequently with no inconvenience.

On the 30th of June he came to tell me that while stooping in his garden some days previously, a mouthful of blood had come up, and his cough had returned.

July 10th. He now expectorated muco-purulent matter of little or no fœtor; the pulse was more rapid and emaciation proceeded rapidly.

15th. He had slightly improved under the tonic treatment again.

August 10th. I saw him with another practitioner, who had occasionally visited him. We could discover nothing amiss in the lungs, and he coincided with my diagnosis.

24th. Still very ill; still nothing to be detected in the lungs.

September 3rd. Since last visit he had complained much of pain in the lower part of the right side, on which he could not lie; decubitus on the back; the cough was very troublesome; the expectoration purulent and fetid. The lower part of the right side of the chest was now decidedly dull on percussion; the expiratory murmur very rough, loud, interrupted by occasional large moist sounds. The voice anteriorly at that part was tubular and snuffling; pulse 90; respirations 36; skin cool; emaciation great; appetite good.

7th. I put him under a course of the iodide of iron.

16th. A little better, I could detect no moist sounds in the lung.

October 6th. Very much improved; getting round, he hoped quite, as he had done last year. He still coughed and the expectoration became fetid after standing some time.

31st. He came to ask my permission to resume his duties, as he felt quite well. I withheld it however, and he continued to improve throughout November and the first weeks of December.

On the 4th, and again on the 6th of January, he had severe rigors, and on the 8th I found him much worse, in bed, with acute pain at the superior part of the abdomen; the cough very troublesome; much exhaustion and debility; pulse irritable, small and weak.

12th. I found him jaundiced all over; urine dark; stools scanty; cough very bad, and expectoration muco-purulent; much dulness and large moist sounds at lower part of right side.

16th. Peritoneal inflammation had evidently now arisen, and the pain was most intense on the left side.

17th. Blistering had relieved the pain considerably, but he was evidently sinking, and unable to expectorate from weakness. He died on the 18th.

Post-mortem examination thirty hours after death. Body jaundiced deeply, and considerably emaciated; the pleuræ of the left side were slightly adherent, but the lung was healthy; the heart was pushed over considerably to the right side; the upper lobe of the right lung was healthy, but the pleuræ were adherent in their whole extent; the middle and lower lobes were very much condensed and contracted, adhering to the ribs by very old strong fibrous connections, and quite

incorporated with the diaphragm. When cut into at the lower part it appeared a homogeneous mass of condensed cellular tissue, in which the bronchi were seen filled with a sanious purulent matter. In contact with the muscular tissue of the diaphragm were several irregular ulcerated cavities filled with the same sanious pus. The upper surface of the liver was adherent in its whole extent to the diaphragm; in some places the adhesions seemed recent, but particularly at the spot corresponding to the abscesses in the lung, they were very firm, and evidently of long standing. When cut into the substance of the viscus was seen to be quite infiltrated with numerous small and some large abscesses, filled with unhealthy fetid pus; it was considerably enlarged and very convex. The peritoneal inflammation had extended to the spleen, nearly the whole surface of which was covered with recently-exuded lymph. The other viscera were healthy.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF WILLIAM SANDS COX, ESQ.

By Peter Hinckes Bird, one of the Resident Medical Officers.

(*Continued from page* 42.)

Case XX.

CARCINOMA OF THE MAMMA.

Mary Ann Mason, aged 49, admitted into the Queens' Hospital, May 29th, 1846, under the care of Mr. Sands Cox, to have the operation for the removal of the breast performed. She is unmarried, and of spare habit. She states that last November she first perceived a small tumour on the left breast, accompanied with a sharp darting pain; the tumour was at first moveable, but afterwards became fixed, and the nipple gradually became retracted; it was lanced about three months ago, since which time it has rapidly increased in size; it has been much inflamed lately, and poultices have been applied; the discharge from it has never been fetid; has bled much at times. She states that she has got much thinner lately, but has no cough; her parents are both alive and enjoy good health; she is not aware that she ever received a blow on the part; is very anxious to have the breast removed.

Present State.—On examination, the breast presents a large open wound with fungous granulations, and an inflamed irregular margin; it discharges a thin, but not offensive, matter, which does not excoriate the neighbouring parts; the parts surrounding the wound feel hard; the nipple is slightly retracted, and the integument puckered; complains of occasional, not severe, lancinating pains, as if "strings were pulling;" no enlargement of the axillary glands can be discovered; has no cough; sleeps pretty well, occasionally disturbed by the pain; appetite good; bowels open; tongue clean; pulse pretty strong, 86.

June 1st. The breast was removed this morning by Mr. Cox in the following manner:—The patient being placed on a well-cushioned chair, and the pectoral muscle being rendered tense by an assistant keeping the arm back, two semicircular incisions were made, meeting at their extremities, including the whole of the diseased mass, and the suspicious integument, the direction of the wound being made obliquely downwards and inwards; the entire mass was dissected out, and every suspicious atom carefully removed; three vessels required ligatures; the lower part of the pectoralis major muscle, to which part of the diseased mass was attached, was completely exposed to view during the dissection. The patient bore the operation with stoic firmness; the wound was after a little time lightly dressed, and the patient put to bed.

Examination of the Breast.—On being cut into, the diseased mass afforded considerable resistance to the knife, and gave the squeak peculiar to scirrhus; septa were seen diverging from the centre to the surrounding parts; in various parts of the breast were also several cysts, containing a yellowish serous fluid; these cysts occupied the place of the true glandular structure. A small portion of the scirrhous mass under the microscope presented the cells peculiar to it, embedded in their stroma.

June 3rd. Sleeps well at night; complains of slight pain in the wound, which looks healthy.

10th. Doing well; granulations healthy; no lancinating pain in the wound; no swelling of the axillary glands; appetite good; getting stronger.

20th. The wound is granulating over, and presents a healthy appearance; health improved.

July 3rd. Doing well; cicatrization is rapidly proceeding.

23rd. Nearly healed over; complains of no pain in the wound; no swelling of the axillary glands.

28th. Quite healed; health much improved; looks better, and is decidedly fatter; no cough. Discharged cured.

Of the organic affections to which the female breast is liable, cancer is incomparably the most common and the most important; the scirrhous species is by far the most frequent; the encephaloid but rarely occurs; while colloid, especially as constituting the mass of a tumour, is excessively uncommon.

It is said to be of more frequent occurrence in women who have not borne children, whether married or single, than in mothers. Sir Astley Cooper thinks it very probable that the natural change which the breast undergoes in the secretion of milk, has some power in preventing this disease; he knew one individual, however, with this disease, who had been pregnant seventeen times. Its evolution seems connected with the disappearance of the catamenia, for it most frequently appears in women who have had their change of life, its occurrence before the age of 30 being extremely uncommon. This patient was in her 49th year. According to Sir Charles Bell, scirrhus of the breast belongs to that period of life when the uterine functions cease; menstruation becomes irregular, both in respect to time and quantity; long intervals occur,

after which the discharge is profuse, with unusual disturbance of the general system, The great sympathy between the uterus and the mamma is very remarkable; and upon this sympathy the affection of the mamma does, in a great measure, depend. Mr. Carmichael has, however, seen scirrhus of both mammæ in a child, aged 12; and Sir Everard Home relates a case in which it occurred at the age of 15. On the other hand, persons of the most advanced age are not exempt from the chance of its development. Dr. Walshe relates the case of a female under his care who was nearly 70; Sir Astley Cooper has seen the disease in a female, aged 86; and Cruveilhier maintains that such facts are of almost too frequent occurrence to be looked on as exceptional.

According to the opinion of Sir Astley Cooper, scirrhus of the breast occupies from two to three years in growing, and from six months to two years in destroying life; but in this case, the patient only perceived it seven months previous to its extirpation. This case is also remarkable for the absence of pain, which was never much complained of, and was seldom attended with exacerbations; the case is also peculiar on account of the number of cysts which occupied the substance of the breast.

The results of the operation for the extirpation of cancer are very unfavourable. Mr. Mayo's experience* has led him to the conclusion that, "after amputation of a scirrhous breast, *under the most favourable circumstances*, that is to say, when the operation is performed at the earliest period at which the structural character of the disease has declared itself in the gland, no other part being yet invaded by it, and the diseased structure being entirely removed, I believe that *in ninety-nine cases out of a hundred the disease returns* either in the cicatrix, or in the axillary or subclavian glands. The operation, therefore, cannot be performed with any reasonable prospect of saving the patient eventually from the disease." Dr. Macfarlane states that he has "never seen a case, *even of the most favourable description, in which the disease did not return*, although every precaution was adopted to render the operation successful." Dr. Macfarlane refers to 118 cases, and although in the majority the parts were freely and extensively removed, at an early period, and under the most favourable circumstances, in many instances no distinct indication of constitutional deterioration being present, yet in *all* the disease returned both externally and internally, and proved fatal.

What then, are the cases in which amputation of a scirrhous mamma may be deemed proper? Sir Benjamin Brodie gives the following reply:—"When the skin is perfectly sound—when the nipple is not retracted—when there is no diseased gland in the axilla—when there is no sign of internal mischief—when there is no adhesion of the breast to the parts below—and when the patient is not very much advanced in life, I should say, that there is a reasonable chance of an operation effecting a cure. I do not intend to say that in all expected cases there will be a permanent cure, far from it; but there will be in some instances, and the chance of it may be sufficient to warrant you in recommending the patient to submit to the operation. I have the satisfaction of knowing, that several persons on whom I have operated under these circumstances, are now alive and well, but who would certainly have been dead long since, had I not had recourse to it."

I may here remark, that the treatment this patient received three months previous to her admission into the hospital was unwarrantable in the extreme; no man, who understands his profession, would ever think of thrusting his lancet into a scirrhous breast; for this imprudent act caused in this case, by the irritation it produced, the rapid increase in the tumour, and the throwing out of an extensive fungus, which, by repeated bleedings, was enfeebling the patient.

* Outlines of Pathology, p. 573.

Case XXI.

COMPOUND FRACTURE OF BOTH THIGHS AND LEGS.

Samuel Hare, aged 40, labourer on the Gloucester railway, admitted into the Queen's Hospital, on July 29th, 1846, at half-past five o'clock, p.m. It is stated that about an hour previously, a loaded luggage train passed over the lower part of his body; he did not lose much blood at the time.

When admitted he was in a complete state of prostration, with cold skin, weak slow pulse. On examination, there was found compound fractures of both legs and thighs, with a large lacerated wound on the right thigh; very slight oozing of blood from the wound. Stimulants were administered, but he gradually sank, and expired at twenty minutes past six o'clock, p.m.

On *post-mortem* examination the next morning, the following extensive injury was discovered:—A compound comminuted fracture of the right femur, about its middle third, with a large lacerated wound, extending more than six inches from above downwards, and four inches across, the muscles beneath on the inner side of the thigh being extensively lacerated and torn; comminuted compound fracture of the right tibia and fibula, the former bone being much shattered at the junction of its middle, with its upper third; a lacerated wound on the outer side of the right ankle, and one also on the sole of the foot; a compound comminuted fracture of the left femur, with a lacerated wound of about half the size of that on the right; a very extensive compound comminuted fracture of both the bones of the left leg.

No wounds or fracture of any other part of the body was discovered; the marks made by the carriage wheels are very evident on the right thigh.

The severe nature of the accident caused in this patient such a prostration of the system, that re-action did not ensue; had he revived amputation of both thighs above the seat of injury, would have been the only chance left for recovery.

(To be continued.)

NORTH STAFFORDSHIRE INFIRMARY.

CASE OF EXOSTOSIS OF THE TIBIA, AND OPERATION.

By J. Seddom, M.D., F.R.C.S., &c., lately one of the Surgeons to the North Staffordshire Infimary.

Joseph Hubball, agricultural labourer, aged 21, married, of florid complexion and healthy appearance, was admitted into the North Staffordshire Infirmary, January 5th, 1846. About two years and a half ago, his attention was first called to a "lump" in the upper and back part of the right leg, by uneasiness in the part, which was attended with occasional numbness in the ankle; there is no very marked swelling of the part, but the muscles of the calf, on examination, seem to be stretched, and a hard tumour can be felt firmly attached to the upper and posterior part of the tibia. A pulsating blood-vsssel can be traced on the outer edge of the tumour. The patient thinks the swelling may have been caused by leaping. Leeches, blisters, and other measures had been resorted to before his admission. He was directed to take Potassii Iodidi, gr. iv., twice a day, and he had a strong compound iodine solution to apply to the tumour.

This plan was unremittingly pursued till the middle of April, but the tumour had become decidedly larger, and the patient was now suffering considerable pain. A consultation of my colleagues was therefore called, when I submitted for their consideration a proposal to remove the tumour by excision; this was decided upon, and the operation undertaken, May 2nd.

A free incision, commencing at the lower part of the poplitieal space, and within the inner hamstring, was extended about four inches downwards, on the inner edge of the gastrocnemius, and parellel with it. This was continued across the muscle, and carried a little upwards, so that the cut had somewhat of a hooked appearance. By this means, a flap was formed of the muscles of the calf, which was turned upwards; two bleeding vessels were tied at this stage of the operation. The tumour now became apparent, covered only by an expansion of muscular fibres. The house-surgeon, Mr. S. Alford, having drawn aside the vessels and nerve, by means of a hooked copper spatula, the muscular fibres were divided so as to expose the tumour clearly; it had an extensive attachment to the tibia, and overhung its inner edge, so as to fill up the interosseal space at this part. By means of a chisel and mallet applied to its inner edge, it was partially divided; the chisel was then worked into the internal structure of the tumour, with the hand alone, and by raising the handle of the instrument, the bony mass was forced from its attachment; a few projecting points of bone were removed by the bone-nipper. Some lint having been applied to the bottom of the wound, the muscular flap was laid down, and a piece of lint placed over it, and this being retained by a bandage loosely applied, the patient was carried to his bed. Sumat Tinct. Opii, min. xxv. e Mist. Camph., oz. j. statim. Hydrarg. Chlor., gr. iv., hora somni.

The operation was effected with much less difficulty than was anticipated. The tumour was as large as a middle-sized potato, had a nodulated appearance, and a flesh colour, having somewhat the resemblance of large granulations; but this appearance was only superficial; internally it had a cancellated bony structure. The diameter of its base was nearly three inches.

May 3rd. The limb somewhat swelled; the bandage and outer dressings were removed, and lint soaked in warm water applied.

4th. Going on favourably; some fever; bowels have not been moved. Med. Efferv. Ol. Ricini, oz. ss. Appl. Catapl. Lini vulneri.

6th. Some erythema about the ankle. Appl. Catapl. Lini parti affectæ.

12th. Going on well; the muscle bulges from the wound, but has a healthy granulating appearance; general health good. Middle diet. White lead cerate spread on lint applied to the wound, and support given by a bandage.

17th. Improving. Lint wet in sulphate of zinc lotion applied to the wound, and support given with adhesive straps and bandage.

From this time the patient continued to improve. He was discharged cured, June 30th. Soon after his discharge he resumed his employment as a farmer's servant. I have lately heard of him, and learn that he is perfectly well, and follows his employment without inconvenience.

The difficulties of the operation which presented themselves to myself and colleagues before it was undertaken were:—First, the danger of wounding the vessels and nerve, passing from the poplitieal space; secondly, it was thought possible that the tumour might extend so far upwards as to endanger the opening of the capsule of the joint; and lastly, if the excrescence were of a firm texture there might be considerable difficulty in detaching it from the bone. However, as it was considered that amputation of the limb would soon be required if the tumour continued to increase, it was decided to undertake its removal, having first apprized the patient of the difficulties and danger of the case. I had no apprehension that the disease was of a malignant character, as the patient had a healthy aspect, and his general health had always been good.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, FEBRUARY 10, 1847.

We have lately had our attention drawn to an important document from Mr. Chadwick, which, although addressed to a local authority, the Town Clerk of Liverpool, and for a special purpose, yet contains the enunciation of sound principles, of general application in reference to the subject of which it treats.

This document is in the form of a letter—a well-merited testimonial to the unwearied zeal,

research, and talent evinced by Dr. W. H. Duncan, of Liverpool, in his labours for the sanatory improvement of that emporium of our commerce. The members of the Association will well remember the series of admirable papers on the epidemic fever of Liverpool, by Dr. Watson, published in the Journal of last year, and it is unnecessary to recal the details connected with the sanatory condition of the town therein recorded. It will be sufficient for our present purpose to state, that among the evidence given before the Health of Towns' Committee, to which, and to the reports made to the Commission of Inquiry, it is mainly owing that the attention of the Government and the Legislature has been drawn to the subject, the information afforded by Dr. Duncan on the sanatory condition of Liverpool stands prominent. As Mr. Chadwick, in the letter to which we are referring, justly states, Dr. Duncan's report on the means of improving the health of the population of Liverpool is "one of the most valuable pieces of service that have in their own time been rendered to that population." This he subsequently characterises, in conjunction with other similar reports by Dr. Arnott, Dr. Kay, and Dr. Southwood Smith, Dr. Laycock, Mr. Roberton, and Mr. P. Holland, Dr. Lyon Playfair, Mr. Clay, Dr. Shapter, and Mr. Baker, on the sanatory condition of the metropolis, of York, Manchester, Lancaster, Preston, Exeter, and Leeds, as "reports which advance the new and most important science of prevention, and indicate the principles of a course of measures, which, if they be completely carried out under scientific direction, it may be confidently expected will do more for the improvement of the moral as well as physical condition of the population than any set of measures that have hitherto been presented for the public attention."

The Corporation of Liverpool, roused at length to the importance of attention to sanatory measures, are making the necessary arrangements for carrying into effect those improvements in drainage, ventilation, &c., which have so long and so loudly been called for. Some details as to the pressing necessity for this are afforded by Mr. Chadwick in his letter:—

"It appears," says Mr. Chadwick, "that during one year the excess in number of deaths in Liverpool was no less than 10,000 above the general average mortality of the country. In the year when Dr. Playfair examined Liverpool, with other towns in Lancashire, the excess in the number of deaths in Liverpool above the rate of mortality in Ulverstone, in the same county, was 3611. The loss of life by all who died that year, as compared with Ulverstone, was, on the average, twenty-one years:—the loss of life of the adults who died in Liverpool, as compared with Ulverstone, was on the average, twelve years and six months to each individual. Supposing the lost labour of these adults to be worth only ten shillings per week, the lost productive labour of that year was, demonstrably, a loss of nine hundred thousand pounds. The loss from the excess of sickness which accompanies the excessive mortality,—supposing twenty cases of sickness to one death, and the expense of cure or alleviation only one pound per case, must have been one hundred thousand pounds:—the loss of expense from the excess of funerals alone, at only five pounds per funeral, must have been eighteen thousand pounds during that one year.

"Now, there were at the time of the census 165,094 adults in Liverpool. The impending loss of life to each of these adults is twelve years and a half—that is to say, of death twelve years and a half—before others whose sanatory condition is better, will have to submit to the general doom. Taking this premature loss of life in the pecuniary view merely,—reckoning the value of each adult's productive labour at no more than ten shillings a week,—the impending loss is at least £325 per adult individual."

Such is the loss experienced by the population of Liverpool in life, health, and productiveness. Let us now see what are the arrangements which are to be made to meet it. Among the foremost of these is the establishment of an efficient system of inspection and the appointment of a qualified inspector. The actual extent and nature of the evil must be detected and laid bare before the proper remedies can be applied; and these again require to be indicated, the best mode of their application to be pointed out, so as to accomplish the end proposed, and their working, also, to be superintended by competent persons.

"The subject matters of the attention of the officer of health," we again quote from Mr. Chadwick, "are those causes which affect the condition of the population in the wholesale, causes which frequently cannot be met by separate and isolated arrangements in single cases. For individual cases, alleviation only is in general available; and the business of alleviation or cure, now engages the chief, if not the sole, occupation in the borough of Liverpool of twenty-seven physicians, 325 surgeons and apothecaries, and 365 chemists and druggists."

To meet this requirement the wealthy Corporation of Liverpool proposes the appointment of a medical inspector, with a salary of £300

per annum! with liberty to engage in private practice!! In reference to the labours of Dr. Duncan, Mr. Chadwick observes:—

"At the very outset, I would say that a *pension* of £300 per annum would be but a sorry recompence for what he has already done for the population of Liverpool, by the preparation of the two reports on their sanatory condition."

He elsewhere shews, in reference to the proposed amount of salary, that—"For the more important business of *prevention*—for investigating and indicating the removable or preventible causes of sickness and mortality, which ravage a population of from 280,000, or more, of persons, it appears that the Corporation propose to appoint one officer only, and to pay very little more than £1 per thousand of the persons whose general health it will be his business to protect, by indicating the general arrangements requisite for that purpose!"—and that the proposed expenditure to ascertain and point out the means of averting the impending loss of £325 per adult individual before alluded to, is "at the rate of half a farthing per annum for each adult."

"My estimate," observes Mr. Chadwick, "of the service requisite for the initiation of measures of prevention in Liverpool was of three or four officers of health at the least, giving their whole time to the service, at an expense of £2,200 per annum, which, if efficiently directed, would be a very economical expenditure, as powerfully tending to reduce the annual charge of £18,000 for the excess of funerals alone. But the intended compensation for the inadequate pecuniary provision, for the services of one officer, that he may take private practice, is entirely destructive of all efficiency, even if a full number of officers were appointed, and the remuneration assigned were adequate."

And again, in reference to the subject of combining private practice with the discharge of public duties:—

"Regular private practice not only acts constantly as an inducement to the neglect of regular public duties, but often as a severe penalty for the proper performance of them. In tracing the causes of epidemics, the officer of health must at least occasionally find it in the mismanaged or neglected state of properties owned by his patients, or by persons holding local public office, persons of powerful influence, who sooner or later may exert it to his prejudice."

It will not fail to be observed, that the foregoing remarks, though applied to the individual case before us, are capable of being extended to other localities, and to other official medical duties performed throughout the country for a very inadequate amount of remuneration, for the smallness of which the opportunities afforded for private practice have been held out as an inducement and a compensation. We rejoice to see Mr. Chadwick taking so just a view of these transactions, and we cannot but think that the intercourse which that gentleman has enjoyed in the course of certain of his official duties with such men as Dr. Duncan, by rendering him better acquainted with the talents, energy, and devotion required for the efficient discharge of medical duties, has tended to remove some early prejudices from his mind.

We shall conclude these observations with one more extract from this admirable letter:—

"It is possible, and probable, that Dr. Duncan might be quite willing to perform the services in question gratis, and even be at expense (as he must already have been,—and I have reason to know he has been) in performing them;—but that does not alter the question or the pernicious character of the example.

"The principle set forth by Mr. Burke in his speech on economical reform, as applicable to public offices of the general government, are equally applicable to such local offices as the one in question. 'I will,' he says, 'even go so far as to affirm, that if men were willing to serve in such situations without salary, they ought not to be permitted to do it. Ordinary service must be secured by the ordinary motives to integrity. I do not hesitate to say that that state which lays its foundation in the rare and heroic virtues will be sure to have its superstructure in the basest profligacy and corruption. An honourable and fair profit is the best security against avarice and rapacity, as in all things else a lawful and regulated enjoyment is the best security against debauchery and excess.'"

Review.

Lectures on the Comparative Anatomy and Physiology of the Vertebrate Animals. Delivered at the Royal College of Surgeons, of England, in 1844 *and* 1846. By RICHARD OWEN, F.R.S. Part I. Fishes. London. 8vo. pp. 308,

At no period, perhaps, has natural history, ancient or modern, been so extensively and successfully cultivated, as at the present day. The Fauna of bygone ages has been illustrated, and the science of zoology, as it now exists, elucidated by the labours of Hunter, Cuvier, Buckland, Owen, Agassiz, and others. The impulse which has been given to science by the British Association, and the interesting expeditions which have been undertaken for scientific, purposes.

have undoubtedly tended to direct the public taste into this channel; but from higher considerations, the importance of a knowledge of the anatomy of the inferior animals, and a familiarity with their habits, has been of late more fully recognised; and there is reason to believe that ere long, natural history will be received as a part of general, as comparative anatomy is now of medical, education. To our illustrious countryman, John Hunter, to the immortal Cuvier, and to Owen, upon whom the mantle of Cuvier has been gracefully described as having descended, are we indebted for the most valuable discoveries in this department of science.

Independently of his other important works, the "Lectures on Comparative Anatomy," by Professor Owen, have been generally recognised as conveying the most valuable and profound information on that subject which has yet been communicated; and we hailed the appearance of the second volume with unmitigated pleasure, which has been increased rather than diminished by its perusal. After a careful consideration of its contents, we pronounce it to be a work which must add greatly to the already high reputation of its author.

It will be recollected that in 1843, Mr. Owen published a volume of lectures "On the Anatomy of the Invertebrata." Various causes delayed the appearance of the present volume beyond the period originally intended for its publication; but we have no reason to regret that circumstance, as the Professor informs us, that "The desire to verify some of the propositions there enunciated, by repeating the observations on which they were founded, has led to many new dissections and examinations of numerous specimens; and that the utility of the present volume has been farther regarded, by ingrafting into the text some remarkable discoveries with which the science of comparative anatomy has been enriched, since 1844; and by adding details, which the time allotted to the Hunterian course compelled me to omit in the theatre."

Our space will not admit of our entering into the merits of the work *seriatim*; we must confine ourselves therefore to a cursory survey of its contents. The Introductory Lecture deserves a careful perusal; and many of its passsges are full of beauty. Take for instance the following:—

"And first permit me to dwell a little on the inestimable privilege which we enjoy in entering on our professional studies, by the portal of anatomy. How vast and diversified a field of knowledge opens out before us as we gaze from that portal? Consider what it is that forms the subject of our essential introductory study; nothing less than the organic mechanism of the last and hightest created product which has been introduced into this planet. Contrast this, which both sage and poet have called the 'noblest study of mankind,' with the dry and unattractive preliminary exercises of the lawyer or the divine. Every new term which the anatomical student has to commit to memory is associated with a recognisable object,—with some part which may be vibrating, contracting, or pulsating in his own frame.

Again, "We know that it has pleased God to grant us faculties, by the right use of which we may obtain a true knowledge of His works; and it seems part of His providence to permit certain parcels of knowledge to be thus introduced from time to time, to the dissipation of the erroneous notions which previously prevailed. By the exercise of these faculties, the true shape of our spheroid was determined, and after some opposition, accepted; next its true relations to the sun, as repects its motion. It has been reserved for the present generation to acquire more just ideas of the age of the world; and anatomy has been, and must be, the chief and most essential means of establishing this important element in the earth's history. But anatomy aids not only the geologist, but the geographer. By comparing the local distribution of restored extinct species from coeval geological strata over all the earth, with the geographical distribution of existing animals, we obtain an insight into the past conditions of continents and islands; we determine that our own island, for example, once formed part of the continent, and obtain data for tracing out much greater mutations and alternations of land and sea."

The following five lectures are devoted to a consideration of osteological homologies, and the osteology of fishes. "The great aim," says Mr. Owen, "of the philosophical osteologist, is to determine by natural characters, the natural groups of bones, of which a vertebrate skeleton typically consists; and next, the relations of individual simple bones to each other, in these primary groups, and to define the general, serial, and special homologies of each bone throughout the vertebrate series."

The opinions brought forward by the author on this subject, bear evidence of acute observation, profound thought, and sound judgment; and will, we think, be found to stand the test of time. Interspersed with the necessary detail—which is as interesting as a description of bones can be—are observations indicative of much sagacity, and a just appreciation of the adaptation of means to ends.

"The predaceous sharks are the most active and vigorous of fishes; like the birds of prey, they soar, as it were, in the upper regions of their atmosphere, and, without any aid from a modified respiratory apparatus, devoid of an air-bladder, they habitually maintain themselves near the surface of the sea, by the actions of their large and muscular fins. The gristly skeleton is in prospective harmony with this mode and sphere of life; and we shall subsequently find as well marked modifications of the digestive and other systems of the shark, by which the body is rendered as light, and the space which encroaches on the muscular system as small, as might be compatible with those actions; besides, lightness, toughness, and elasticity are the qualities of the skeleton most essential to the shark. To yield to the contraction of the lateral inflectors, and aid in the recoil, are the functions which

the spine is mainly required to fulfil, in the act of locomotion, and to which its alternating elastic balls of fluid, and semi-ossified bi-concave vertebræ, so admirably adapt it. To have had their entire skeleton consolidated and loaded with earth's matter, would have been an encumbrance altogether at variance with the offices which the sharks are appointed to fulfil in the economy of the great deep."

Contrasted with the sharks are the sturgeons. "The sturgeons were designed to be the scavengers of the great rivers: they swim low, grovel along the bottom, feeding in shoals on the decomposing animal and vegetable substances which are hurried down with the debris of the continents drained by those rapid currents. Thus they are ever busied, re-converting the substances, which otherwise would tend to corrupt the ocean, into living organised matter. These fishes are therefore duly weighted by a ballast of dense dermal osseous plates, not scattered at random over their surface, but regularly arranged, as the seaman knows how ballast should be, in orderly series along the middle and at the sides of the body. The protection against the waterlogged timber and stones hurried along their feeding grounds, which the sturgeons derive from their scale armour, renders needless the ossification of the cartilaginous case of the brain, or other parts of the endo-skeleton: and the weight of the armour requires that endo-skeleton to be kept as light as may be compatible with its elastic property and other functions. The sturgeons are further adjusted to their place in the liquid element, and endowed with the power of changing their level, and rising with their defensive load to the surface, by a large expansive air-bladder."

The myology of fishes is described in the seventh lecture; their neurology and organs of special sense in the eighth. The ninth is devoted to their digestive organs; whilst the two last chapters treat at length of their pneumonic and renal systems, their generative system and development.

We must here close our hasty sketch, which we do with reluctance, feeling how little such a notice as the present can convey an adequate idea of the merits of the work; but we have at least the satisfaction of knowing, that it may have the effect of attracting attention to the volume itself, the perusal of which will repay any amount of time or labour bestowed upon it.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

November 7th, 1846.

JOSIAH CLARKSON, Esq., in the Chair.

ABSCESS OF THE SPLEEN.

Mr. W. C. Freer exhibited a specimen of abscess of the spleen, taken from a patient who had died of fever.

Charles White, aged 30, single, a servant. At the commencement of August he began to experience deep-seated pain in the epigastric region, and deranged digestion and occasional vomiting. In September fever came on, and he became an in-patient of the hospital. On admission, his symptoms were those of the epidemic idiopathic fever, requiring stimulants. His reason failed for some time, and on recovery he directed attention to an abscess as large as a child's head, on the left side of the lumbar spine, presenting precisely the appearance of the common lumbar abscess connected with diseased bone. He died October 15th.

Autopsy.—An abscess of the spleen at the back of the peritoneum which was unruptured; stomach, liver, and other viscera healthy.

ANEURISM OF THE AORTA: STEATOMATOUS TUMOUR.

Mr. W. C. Freer next presented an aneurism of the arch of the aorta, taken from a woman aged 50; also the uterus from the same patient, which had two small steatomatous tumours between it and the rectum, the os tincæ being a mere point.

Isabella Haines, aged 50, has considered herself asthmatical for some years, and has frequently had attacks of spasmodic dyspnœa. She became an in-patient of the hospital, and died shortly after admission, no opportunity being afforded for an investigation of the case.

Autopsy.—An aneurism of the arch of the aorta, the size of an orange, the cavity being partially formed by distension of all the coats of the artery, and the remainder by a true aneurismal pouch, the aperture of communication being circular, and an inch and a half in diameter. The right lung was much smaller than the left, apparently from pressure upon the right bronchus having allowed but a small quantity of air to enter the lung. The uterus had two small steatomatous tumours between it and the rectum, the os tincæ being a mere point.

ADHESION OF THE PLACENTA: INFAMMATION OF THE UTERUS

Mr. W. C. Freer exhibited a uterus taken from a patient aged 24, who had miscarried, in which a considerable portion of the placenta remained attached over the right Fallopian tube; he gave the following history of the case.

Jane Williams, aged 34, at the commencement of October, suffered from some general derangement of health, and miscarried with her fifth child the middle of October. She lost a large quantity of blood and shortly afterwards symptoms of typhoid puerperal fever presented themselves. She became an in-patient of the hospital on the 4th of November, and had the following symptoms:—Uterine tenderness, acute pain in the right thigh, jaundice, pulse 130 to 150, and extreme prostration. She died on the 6th instant.

Autopsy.—A considerable portion of placenta remained attached over the right Fallopian tube; the mucous membrane of the uterus was disorganized, and the uterine sinuses contained pus. The kidneys were slightly diseased. The other organs of the body were healthy.

MENINGEAL APOPLEXY.

Mr. James Russell, jun., exhibited a portion of a

brain taken from a patient who had died suddenly from effusion of blood over the entire surface of the brain. He gave the following particulars:—

Mrs. T.———, aged 35, for the last three years has suffered from pain in her forehead at frequent short intervals, seldom exceeding a fortnight in duration. Has had no other complaint. On the evening of October 13th she was visiting her sister, and was sitting with her head leaning on her hand, when having just completed a sentence, her head dropped, her hands fell lifeless, and in ten minutes she was dead. Mr. Hinds saw her in about six or seven minutes, he informs me that she made about three stertorous inspirations after his arrival; her face was perfectly pale; the heart was beating.

Sectio-cadaveris forty-five hours after death. Body well nourished; stature rather tall; rigor mortis very firm; face quite pale; decomposition had not commenced; a considerable quantity of blood had issued from the wound at the bend of the arm. On removing the calvarium, fluid-blood flowed apparently from the outer surface of the dura mater, probably from the longitudinal sinus. The pia mater was enormously congested over the whole surface of the brain, excepting at the vertex, in the space of the palm of a small hand; the vessels of the pia mater were all surrounded by ecchymosis in the meshes of its cellular tissue, mottling the surface of the brain with bright red; the same appearance extended down the great fissure on either side at the corpus callosum. On the anterior edge of each hemisphere was a large thick patch of effused blood; and in a subsequent stage of the dissection, on slicing the brain, the cut surface of the convolutions exhibited a bright red line, produced by the processes of the pia mater. Towards the base the effusion became more abundant and more uniform. At the base the olfactory nerves were matted together with blood, as were the optics. The pons was concealed by a dense coagulum, which also completely enveloped the medulla oblongata for the thickness of half an inch. A coagulum also lay on the under surface of the cerebellum; and a very thin lamina of blood covered all the cerebellum. From the examination we could make from the base of the skull, the upper portion of the cord was also enveloped in blood. The great vessels at the base were healthy; the cerebral substance very firm, except the fornix, which was very soft; corpora striata and thalami healthy; the ventricles contained a considerable quantity of serum, apparently tinged with blood; choroid plexures and velum interpositum very pale; the cerebral substance generally very exsanguine, as was especially seen in the grey matter; the integuments of the head were not loaded with blood. Heart quite healthy, small, and rather contracted; right side contained fluid blood, but not in nearly sufficient quantity to fill the cavities; the left side contained a very small quantity of dark fluid-blood; (the state of the cavities was ascertained before any wound of the vessels;) about half a pint of serum in each pleural cavity; lungs very dark, and loaded with bloody serum, crepitated imperfectly; the middle lobe of the right lung, however, presented its healthy appearance; some emphysema at the apex of the right lung. Liver healthy, fluid-blood flowed freely from its divided surface; kidneys very firm, apparently much congested; intestines pale. Vena cava contained liquid blood; aorta nearly empty.

December 5th, 1846.

James Russell, Esq., in the Chair.

HYDATIDS FROM THE UTERUS.

Mr. Brindley presented a specimen of uterine hydatids, discharged by a patient, aged 32, who supposed herself to be in the 5th month of pregnancy. She had aborted six or seven times about the third month, and had been twice delivered of dead children at the full period.

MICROSCOPICAL SOCIETY OF LONDON.

EXAMINATION OF DELICATE ORGANIC STRUCTURES.

A paper was read at a late meeting of this Society by John Anthony, Esq., "On a Method of Rendering the Appearances in Delicate Structures visible by Means of Oblique Transmitted Light." This method depends upon the placing the object in such a position that the fine lines or other delicate markings are exactly at right angles to the illuminating rays, when these lines, &c., will be at their maximum of distinctness, and thus tissues may be rendered distinctly visible whose existence when viewed in the ordinary manner might be considered as exceedingly doubtful. The object employed to illustrate this position was the navicula of the Humber, one of the most delicate of test objects, which, under ordinary circumstances, appears perfectly transparent; but when viewed in this way, not only exhibits a double set of lines, but also transverse lines, giving the whole the appearance of being covered with a delicate net-work.

Four drawings of this object were exhibited, showing it in as many different positions, making a complete revolution of the field in which the markings just mentioned were distinctly visible. In order to bring out these appearances, it is necessary that the light should be very oblique, and must be passed laterally through the "bull's eye," in such a manner that the object (the navicula,) may appear of an intensely blue colour, nearly opaque. The stage is then to be gradually turned round until the shell is in the position to be best seen as described.—*Annals and Magazine of Natural History*, January, 1847.

[This process is obviously equally applicable to the examination of delicate vegetable and animal structures in general. Mr. Legg, in a paper "On the Application of Polarized Light in Microscopic Observations," read at a subsequent meeting of the Society, described a series of polarizing apparatus, capable of being adapted to the microscope, and calculated to effect a similar object, the analysis of the structure of delicate organic textures being thus effected by the action of polarized light.

NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY.

We have been requested by the Committee of the National Institute of Medicine, Surgery, and Midwifery, to insert the subjoined address.

TO THE GENERAL PRACTITIONERS OF MEDICINE, SURGERY, AND MIDWIFERY.

GENTLEMEN,—In the expectation that an inquiry into the state of the Laws affecting the Medical Profession in this country will very speedily engage the attention of the Legislature, the Council of the National Institute of General Practitioners in Medicine, Surgery, and Midwifery, have presented a Memorial to the Right Honourable the Secretary of State for the Home Department, describing the anomalous position of the very important section of the Profession which they represent, and calling the attention of the Government of this Country to some of the great and acknowledged evils and disadvantages that press peculiarly upon that section as a class. The Memorial also prayed for the assistance of the Government—on Public as well as on Professional considerations—to obtain the amelioration of those evils and disadvantages with as little delay as possible.

To the document in question, the Council of the National Institute invite the earnest attention and serious consideration of all classes of Medical Practitioners. The Medical Profession in England is at this moment surrounded by the greatest difficulties from inadequate Laws and ill-adapted Institutions; whilst many causes have combined for a long series of years to arrest and to render abortive every attempt to amend and re-construct them. This is surely a matter of sufficiently serious importance to deserve a small share of time and attention from each of its members; and were a body of intelligent and honourable-minded men to enter upon the consideration of the subject in a liberal and patriotic spirit, they would find little difficulty in agreeing upon such a general measure of reform as would be acceptable to a large majority of the Profession.

In the absence, however, of such general accordance, and with a view of clearing away some of the difficulties in the way of a satisfactory solution of this complicated question, the Council of the National Institute beg to recall the attention of the General Practitioners in particular, to the circumstances which immediately followed SIR JAMES GRAHAM'S first attempt at Medical Legislation:—When the details of the proposed Bill were carefully examined, the General Practitioners were for the first time made sensible of their own extraordinary position; that although they numbered nine-tenths of the entire Profession, they were unknown as a *collective body;* that they had no *corporate rights*—no *council* nor *executive* to express their wishes or opinions—nor had they any *Common Hall* wherein they could assemble for the purpose of consultation.

The disabilities above referred to were so manifestly injurious to them, that at the first Public Meeting, held at the Hanover Square Rooms, on the 7th of December, 1844, at which nearly one thousand General Practitioners were present, the following resolution was the first proposed and unanimously adopted:—

"That this Meeting is decidedly of opinion, that prior to the passing of any Bill for the regulation of the practice of Medicine and Surgery, it is of the utmost importance to the interests of the Public, that the General Practitioners of Medicine, Surgery, and Midwifery, should be legally recognized and placed in an independent position; and that the Executive Government be respectfully and earnestly requested to suspend the further consideration of the Bill laid before Parliament at the close of the last Session, until this object has been attained."

The Council refer with confidence to the events of the last two years, for a full verification of the principle contained in the foregoing Resolution. By neglecting to perform, in the first instance, an act of common justice to the great bulk of the Profession, a powerful Minister, with all the Government support at hand, after introducing four successive Bills before Parliament, was compelled reluctantly to withdraw the whole of his contemplated measures—thereby acknowledging his inability to complete what he believed to be a most important and necessary measure of Legislation.

That such will be the fate of every attempt at Medical Legislation,—whether it be a simple matter of Registration, or a measure embracing the whole question, is the opinion of the Council of the National Institute, unless an ostensible recognized head and home be found for the General Practitioners—as an indispensable and necessary preliminary to any more extensive or comprehensive measure of Medical Reform. The Council consider it of the utmost importance that the class of Practitioners to which they themselves belong, should, without a moment's unnecessary delay, meet, and strenuously support, the Council in the prosecution of their just claims to a legal recognition; and they have every confidence that their Professional brethren will see the necessity that exists for immediate action, before the attention of the Government, the Legislature, or the Profession is pre-occupied by the consideration of the claims made by the Medical Corporations, or of the proposed Medical Registration Bill. The latter proceeding is most unquestionably ill-timed, whatever may be its intrinsic merits; for, until the General Practitioners are duly recognized as a collective body, with what security can they consent to a Legal Registration, that may place them irretrievably in an inferior and subordinate rank. With these observations the Council conclude by again directing attention to the Memorial presented to the Government, and they call upon their professional brethren, in the true spirit of patriotism, to merge all minor differences of opinion on this important subject, and with the calmness and deliberation befitting a body of scientific and intelligent men, to unite and determine upon some uniform plan of co-operation that may secure an early and satisfactory settlement of the affairs of the Medical Profession.

Signed on behalf of the Council,
ROBERT RAINEY PENNINGTON,
President.

Offices, *pro, tem.*,
Hanover Square Rooms, 4, Hanover Square.
January 26, 1847.

General Retrospect.

ANATOMY AND PHYSIOLOGY.

RUDIMENT OF A UTERUS IN MAN, AND IN MALES OF THE MAMMALIA.

M. Ernest Weber, professor of anatomy at Leipsic, has reported the extraordinary anatomical discovery of the rudiments of a uterus in males of the mammalia. He states:—

1. That in the males of all animals as yet examined by him, including the castor, the hare, the horse, boar, dog and cat, there is a hollow uneven organ placed in the median line, between the extremity of the urinary bladder and the rectum; this he considers to be a rudimentary uterus, and it is called by him the *uterus masculinus*.

2. In man this organ exists in the form of a small elongated bladder, springing from the posterior part of the prostate, and contributing to form the verumontanum.

3. In fœtal rabbits, both males and females, the sex cannot be determined with exactness by the examination of the external genital organs; the internal organs are so similar, that great attention is required to distinguish the male from the female. In both there is a *sinus uro-genitalis*, and a part which might pass for the base of the vagina and the body of the uterus. Into this organ there open in the female the cornua of the uterus; in the male the vasa deferentia, which closely resemble the cornua, with the exception that the latter open into the superior portion, the former into the inferior portion, of the organ. An organ corresponding to a rudimentary vagina, a body and cornua of the uterus, is also seen in the adult male rabbit; it is a non-muscular sac, which contains the semen, and is so irritable that it contracts in the recently dead animal when mechanically excited.

4. In the male beaver, and in the boar, the rudimentary uterus is as in the female, bicornal, situate in the same locality, and covered by a fold of peritoneum.

5. In the dog the orifice of the rudimentary organ appears to be obliterated; as also in the cat. In the horse, and in man, this orifice is also sometimes obliterated, but this is exceptional; in general the *uterus masculinus* of the stallion opens into the urethra, at the verumontanum, by a single orifice.

6. According to the observations of Rathké on the goat and boar, the uterus of the male embryo is at one period so similar to the female uterus as to be scarcely distinguishable from it.—*Archiv. d'Anatomie*, Dec., 1846.

[Sir Everard Home, twenty years ago, pointed out the third lobe of the prostate gland. Is not this the origin of Weber's rudimentary uterus? The organ has been described by Ackermann under the title *uterus cystoides*; and by Guthrie under that of *sinus pocularis*.]

ABSORPTION OF OXYGEN BY THE BLOOD.

The study of the phenomena of respiration was never carried out with an approach to perfection until the chemical knowledge, indispensible to such inquiries, had attained a certain degree of precision. Lavoisier was the first to enumerate the leading proposition:—*Respiration is combustion.* This fundamental proposition being established, it still remained a question, in what part of the system the blood undergoes the changes necessary for the preservation of the economy.

Many theories have at different times been advanced to fill up this hiatus in physiological inquiry. According to Lavoisier, the formation of carbonic acid and water, and the production of azote takes place in the lungs. This theory, against which so many objections have been urged, was nevertheless for a length of time the received opinion, until it was generally abandoned after the publication of the works of Magnus. It was affirmed by that physiologist, that the oxygen of the atmosphere is simply dissolved in the blood of the lungs, and that it is transmitted in this state to the arteries, and that the changes by which carbonic acid is generated take place in the capillaries, the acid so formed, together with the hydrogen, which contributes to the formation of water, being also dissolved in the blood. The blood thus charged is carried to the lungs, and there coming into contact with the air, the carbonic acid is changed for a fresh supply of oxygen, and the same series of phenomena is again reproduced.

The conclusions of Magnus were not, however, destined to remain long without an opponent, for we find that they are combated by Gay Lussac, (*Annales de Chemie*, t. xi.)

There are two leading opinions in the present day concerning the manner in which the oxygen of the atmosphere combines with the constituents of the blood in respiration. According to one of these, the oxygen is dissolved in the blood, and arrives in an uncombined state in the capillaries, and there only unites with some of the elements of the nutritive fluid. Others, without denying the primary solution of the oxygen, suppose that a portion of it enters at once into chemical combination with the blood. They consequently admit that the phenomenon of oxidation takes place in the lungs, while the former limit the production of this phenomenon to the capillaries.

Magnus, in answer to the objections of Gay Lussac, has instituted some new researches into the quantity of oxygen, nitrogen, and carbonic acid held in solution by the blood, which tend still farther to confirm his original opinion. Mulder considers that these experiments do not allow of the deductions which Magnus has drawn from them; as the question is not whether the blood has or has not the power to hold oxygen in solution, but whether this oxygen does not form combinations with the elements of blood, partly in the lungs and partly in the capillaries. In order to examine the question properly, it is necessary according to Mulder, to perform experiments so as to observe, not how much oxygen can be disengaged from blood saturated with air, by the employment of carbonic acid, but how much oxygen is absorbed by venous blood, which does not contain air; in the second place it should be noted how much oxygen can be disengaged in the latter case by the means of carbonic acid. Let us suppose, for example, that venous blood deprived of

air, can absorb $\frac{16}{100}$ volumes of oxygen, and that we can disengage by carbonic acid $\frac{12}{100}$; we are then justified in supposing that this $\frac{12}{100}$ existed in the blood in an uncombined state, and that the remaining $\frac{4}{100}$ had formed chemical unions. Magnus does not allude to such results.

According to Magnus the blood does not contain any substance capable of entering into immediate union with oxygen, but Mulder believes that a fluid of so complex a composition cannot but offer the means of effecting such combinations. He considers, on the contrary, that the action of oxygen on the protein commences at once.

Another question with which Mulder occupies himself, being satisfied that the combination of the oxygen is distributed through the lungs, heart, and capillaries, is the proportion in which the gas combines in each locality. On this point, however, he is not able to offer any definite opinion, but contents himself with further objections to some of the tenets of Magnus.

In considering the different colour of venous and arterial blood, the latter physiologist speaks of the power of the oxide of azote to colour the sulphate of the protoxide of iron by simple solution. It is now, however, says Mulder, ascertained that this colouration is due to a veritable chemical union. In confirmation of this he cites the observations of Peligot. Mulder again denies that arterial is converted into venous blood, by simple solution of carbonic acid, or other acids or alkalies; the change is in his opinion, caused by the production of new transparent substances, which absorb a larger quantity of luminous rays.

Finally Magnus denies the chemical combination of oxygen in arterial blood, because the blood in the lungs is not of a higher temperature than that of the rest of the body. To this, Mulder objects that any augmentation of temperature which might take place is compensated for by the exhalation of water, and by the lower temperature of the venous blood as it arrives at the lungs; and besides, Davy and others have ascertained that the blood in the left ventricle is warmer than elsewhere.

In conclusion, Mulder admits that the solution of a notable proportion of oxygen in the blood is an ascertained fact; but he refuses to acknowledge that with the presence of so large a quantity of oxidizable matters in the blood, the oxidation is deferred until the blood arrives at the capillaries.—*Archiv. d' Anatomie. et Physiologie.* Nov. 1846.

PATHOLOGY & PRACTICAL MEDICINE.

ON VARIOLA, VARIOLOID, VARICELLA, AND VACCINE.

Dr. Koesch, the author of an essay published under the above title, concludes:—

1. That cow-pock is nothing more than small-pox, transmitted to the cow by contact.

2. That persons who have been effectually vaccinated, may in some rare instances contract dangerous small-pox.

3. That small-pox after vaccination, is in the great majority of cases of trifling severity.

4. That the rarity and mildness of small-pox is in proportion to the recency of the vaccination.

5. That small-pox seldom appears after the age of thirty, but is not always less severe when it does so.

6. That the majority of the vaccinated are entirely exempt from small-pox, even though exposed to contagion.

7. The identity of variola and varioloid is demonstrated by their phenomena, development, and by the results of contagion or inoculation.

8. That varicella is in no-wise connected with variola, but is a perfectly distinct disease.

9. That vaccination is the only mode of exterminating small-pox.—*Medicinische Corresp. Blatt.*

PHYSICAL SIGNS OF INCIPIENT PHTHISIS.

M. Dubini has communicated the results of his researches into this difficult subject in semeiology His ideas are for the most part in accordance with those of Fournet, Jackson, Louis, and others, to which he gives valuable confirmation.

In order to study the true signification of modifications of the expiratory murmur, as a diagnostic sign in incipient tuberculization, M. Dubini first endeavours to form an exact appreciation of this murmur in a state of health. As regards its duration and intensity, he adopts the scale of Fournet, which makes it as two, the respiration being as ten, in preference to the evaluation of Barth and Roger. He also lays great stress on the observations of Louis, who found the expiratory murmur prolonged under the right clavicle, but never under the left, in seventeen females exempt from pulmonary disease.

Prolonged expiration is not exclusively confined to the first stage of phthisis; it is met with in chlorosis, in pulmonary œdema, in severe heart diseases, in pleuritic effusions, in bronchitis, and in emphysema; but in emphysema, the expiration is whistling; in bronchitis, which is seldom partial, the whistling expiratory murmur is generally diffused over the chest; and so in other diseases in which the prolonged expiration is present, it exhibits certain peculiarities which distinguish it from the prolonged expiration due to tubercular deposit.

M. Dubini does not regard the above sign as constant in all varieties of tubercular deposit; it is absent when the matter is agglomerated in voluminous masses, (crude turbercle,) between which the pulmonary tissue remains crepitant. The variety in which it is commonly noticed is that which consists in a general infiltration of the pulmonary tissues with miliary granulations. It appears then that prolonged expiration may exist without tubercles, and tubercles without prolonged expiration; but there can be little fear of error when the expiratory bruit is persistent and rough, and more especially if it is unequal, interrupted, and limited to one or other subclavicular region. The diagnosis is rendered next to infallible, if, with this sign, there are accompanying general symptoms proper to the disease. —*Gazette Médicale.* No. 51, 1846.

ON THE USE AND ABUSE OF MERCURIAL PREPARATIONS.

Dr. Sichel gives the following cautions as necessary in the exhibition of mercurial preparations:—

1. The *diet* must be in no-wise stimulant, and as little nourishing as possible. If this is not attended to the plasticity of the blood becomes augmented.

2. All notable change of atmospherical *temperature* should be avoided. Unless this rule be observed, numerous disappointments will occur, and premature salivation is especially likely to be induced.

3. It is a general law that the *special physiological action, or the toxical effect of a medicinal substance, only manifests itself after its action upon the pathological condition* has become exhausted.

The operation of this law is well seen in the employment of narcotics in those affections of the nervous system which afford distinct indications for their use, as neuralgia and tetanus. This last, we know, demands large doses of opium, but the point of saturation must be carefully watched so that the drug may be laid aside when the precursors of narcotism begin to replace the tetanic symptoms; unless we wish to see, as I have often seen in the hospitals, the patient cured of the tetanus to die by opium. The physiological action of mercury is exerted upon the salivary glands, and with the earliest precursory symptoms of salivation, the blood has already lost some of its morbidly plastic character. It is indeed remarkable to what an extent acute inflammation becomes relieved, upon the appearance of the precursors of salivation, and how long these are in making their appearance in intense and essentially exudative inflammations, as iritis, peritonitis, and especially puerperal peritonitis. In this last we are sometimes surprised at finding the abdomen, which the evening before would not endure the weight of the clothes, supporting next day firm pressure of the hand, the precursory symptoms of salivation having manifested themselves in the interval. These are indeed the signs of the system having become sufficiently saturated with the mineral, which must be left off as soon as they appear, our object not being, save in very rare and obstinate cases, to excite actual salivation. Instead of then pushing on the mercury, if the disease does not yield, we must, in the case of inflammation, have recourse to other antiphlogistics; and in the case of syphilis, to iodine, sudorifics, &c., carefully limiting the regimen, and avoiding exposure to cold. When, however, the precursory symptoms are dissipated, and the disease has not yet yielded, we may turn again and again to the mercurial treatment. In syphilis this is almost always necessary.

It is from the non-observance of the above rules, that so much mischief has been caused by this remedy, and so much prejudice has been raised against it. The excitement of profuse salivation is especially mischievous. The anti-plastic action of the drug may, after long use, so diminish the coagulability of the blood, as to produce a *mercurial scorbutus*, very difficult to cure. *Marasmus* may likewise be produced, especially in children and aged persons, if mercury be employed sufficiently long to induce ptyalism or diarrhœa, or the two conjointly. Calomel, particularly, must be given to such subjects with great care. It is not sufficient to withhold it when salivation or purging already exist; but at every visit the condition of the salivary organs and digestive tube must be carefully enquired into. From neglect of this precaution, infants often suffer severely from the prolonged use of calomel.—*Medico-Chirurgical Review*, Jan., 1847, from the *Revue Médicale*, Nov., 1846.

SURGERY.

OPERATION OF MYO-TENOTOMY.

[There can be little doubt that in this, as in all other new operations, there is some risk of abuse, from the want of a due consideration of the cases to which it is safely applicable. It must therefore be a matter of interest to the surgeon, to know what are the veritable indications for its performance, and what are the cases in which mechanical means alone will prove sufficient.]

According to Neumann there is but one pathological condition which is indicative of the propriety of the section of tendons; this is *muscular retraction*. When this is not present, whatever be the state of the parts, the operation will not be followed by its expected results. The muscular retraction referred to manifests itself in general, by a tension and hardness of the tendon or its muscles, which cannot be accounted for by the state of the affected limb. We must be careful not to confound the *retraction* of a muscle, with a *shortening* of its fibres. To shew the importance of a due distinction of these conditions, it will suffice to glance at one of the affections for which tenotomy is most frequently employed, *pes equinus*. A man in perfect health is able, at pleasure, to induce such contraction of the gastrocnemii muscles as shall elevate the heel as much as is commouly seen in *pes equinus*. There is no proof, therefore, that the tendon is *shortened* in this affection; it is only *retracted*, and tenotomy destroys the morbid retraction and rigidity of the fibres, without necessarily causing the elongation of the tendon. And even if it did so, the elongation would be inconvenient, for although the patient would be able to place his heel on the ground, he would walk defectively. Again, it is necessary to separate *morbid retraction* of the muscles and tendons from that which occurs in the aponeurosis and ligaments, forming a real *shortening*.

Among the diseases which require tenotomy, and which depend upon muscular retraction, the author establishes two classes,—those which are general, or those which may appear indiscriminately in any part of the body, and those which are confined to particular localities. The first class includes paralysis and anchylosis, when these are accompanied by permanent retraction of the muscles; certain accidents to which the joints are subject, and which are always accompanied by muscular retraction, such as insensibility, sensation of cold, &c. In the second class he comprises strabismus, ptosis, tortuosities, club-foot, and articular retractions.

Another important question is whether, when several muscles are simultaneously retracted, they should be

operated upon at one or several different times. On this point the author is opposed to M. Guerin, and affirms that it is better to divide several muscles at once if they belong to the same region. If another articulation or limb requires an operation, it should, he observes, be always at an interval of a week at least from the former one.

The author farther states, that tenotomy should never be performed on infants under a year old. The operation for strabismus ought not to be recommended before the age of eight or ten years, as up to this time the resources of nature may prove sufficient. So also for club-foot, we ought never to operate before the age of twelve years, because previously to this age a cure may be accomplished by mechanical means alone. After the age of sixty the author thinks tenotomy useless. Inflammation of a retracted articulation is a potent contra-indication to an operation in all cases.—*Casper's Wochenschrift.*

OBSERVATIONS ON THE INHALATION OF SULPHURIC ÆTHER.

By E. Copeman, Esq., F.R.C.S., Coltishall.

Amongst the novelties of the day nothing has excited a greater or more universal degree of interest than the performance of surgical operations without pain. The reason for this is so obvious that it is needless for me to refer to it. Through the instrumentality of the press, both medical and general, facts are daily brought before the public which prove to demonstration, that by means of the inhalation of æther, the pain of a surgical operation may be avoided; and it is very probable that the wide diffusion of these interesting facts may lead to a trial of the effects of the vapour of æther, not only by surgeons, but also by some who are not educated to the medical profession. But it seldom occurs that a great good is unmixed with evil; and I believe it to be as much a duty on the part of surgeons to represent and warn against danger, as to relieve suffering, and cure disease. Upon this principle I lose no time in communicating the circumstances attending a trial of the inhalation of æther, on the evening of the 23rd instant, in my presence.

The experimenter was a medical gentleman, who requested me to extract a tooth for him, provided he could make himself insensible to pain by means of æther. He breathed the vapour for several minutes without any apparent effect, but soon afterwards thrust the apparatus *suddenly* from him, exclaimed that he could bear it no longer, staggered about the room, and was assisted to a chair. His breathing became very difficult; his arms were stretched out; his fingers extended; and he was perfectly cataleptic. I would then have attempted to draw his tooth, but he showed some resistance, and his breathing was so exceedingly laboured, that it would have been almost impossible to perform that or any other operation. Each expiration was accompanied with a loud *Hah!* his eyelids were closed; his head was hot; pupils not altered; conjunctivæ much injected; pulse 120; and his appearance altogether was so distressing as to excite great alarm in the minds of the bystanders. I applied cold to the head; gave some brandy and water, for his hands were cold; and admitted fresh air freely into the room. Soon the cataleptic symptoms disappeared, and were succeeded by severe hysteria, with about the same degree of consciousness as is usual in that disease. With some difficulty I led him to the outer door, when he exclaimed—"Cover my chest," "cold, cold, cold." He was then removed to the sofa, when he was seized with severe cramp in the legs, the difficult breathing still continuing. I gave more brandy and water; applied hot flannels to the feet, and cold water to the head; admitted fresh air freely, and watched the progress of the case with no little anxiety; for these distressing symptoms continued for *more than an hour*, during which time I had to contend against the most fearful apprehensions of the mother, as well as to administer relief to a near relative who had voluntarily taken a poison, the effects of which I had not before witnessed, and the probable result of which I could not from experience determine. At last a few deep inspirations ushered in a state of semi-consciousness, the patient raised himself to a sitting posture, and looked about him with a vacant stare, the conjunctivæ being very red and suffused. He attempted to rise, but tottered like a drunken man, and suffered a degree of exhaustion and giddiness which lasted until he was taken to bed. He slept well, but next morning complained still of languor. I should mention, that while he was lying on the sofa I applied strong ammonia to his nose, without its producing any visible effect, and he had afterwards no recollection of the circumstance.

The description afterwards given by the patient of his sensations whilst under the influence of the æther, was as follows:—He felt nothing for several minutes, but on a sudden appeared to lose all muscular power. He seemed to take leave of the external world, but experienced a dreadful sensation of universal tremor, and yet a perfect fixedness of the limbs. He felt irresistibly disposed to lie down, and get his head upon the ground; was much distressed with a sensation of cold; also of tightness across the chest; and although he seemed to be aware that persons were talking to him, had no consciousness of what was really passing around him. He said his sensations were so dreadful that he would rather undergo any amount of pain than submit to the same again, which he could compare only to a state of utter helplessness and impending dissolution.

The impression on my own mind was, that I would on no account willingly produce a similar train of symptoms; and that, if such were to be the *frequent* effects of the æther, there would be few who would wish to exchange for them the pain of a surgical operation.

The apparatus employed was a glass jar, with openings at the top, into one of which was inverted a flexible tube for inhalation; and into the other a funnel, containing a piece of sponge, saturated with æther. About an ounce of æther, and several pieces of sponge, were in the jar. The patient was 23 years of age, spare, and of nervous temperament, with a brain very active and excitable. The time at which the inhalation was performed was soon after dinner; I presume,

therefore, that neither was the constitution of the patient suited to the exhibition of æther, nor the time for the performance of the operation judiciously chosen. Certain I am, that it would have been extremely difficult to perform any operation requiring steadiness or delicacy in its execution during the presence of such symptoms as were produced in this instance by the inhalation.

It is clear that great judgment is required in the selection of cases, and that the inhalation of æther ought on no account to be practised by any but competent medical practitioners. The object for which it is employed is so desirable, that in all probability it will become general in the profession; but in order to be useful, *it must be safe*, and I trust the above narrative will prove, as it is intended to be, a warning against the indiscriminate employment of a powerful agent, which, in incompetent hands, or under unfavourable circumstances, is capable of producing very disagreeable if not *dangerous* effects.

Coltishall, January 25, 1847.

AMPUTATION PERFORMED UNDER THE INFLUENCE OF ÆTHER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

Sir,

The result of operations performed upon patients under the influence of æther, will, for a long time to come, be regarded with peculiar interest both by the medical profession and the public; and it seems desirable that the practice of reporting all the cases which occur, whether favourable or otherwise, should be continued, as affording the best means of enabling us, in due time, to obtain a correct knowledge and form a just estimate of the real value of this highly interesting and, I hope, most happy discovery. I am consequently induced to send you a brief report of a case which I had at the Northampton General Infirmary, on Thursday, the 21st inst.

My patient, a little boy 12 years old, had for two or three years been the subject of scrofulous disease of his left knee. Treatment had proved useless, and his constitution had begun to feel the effect of local disease. Amputation therefore became the only chance of saving life, and to this both the parents and the patient were at length induced to consent. The means so happily discovered for preventing the pain of surgical operations not having been tried at this Infirmary, I determined to avail myself of this case for the experiment, and had arranged to call upon the parents and request their consent, but fortunately the mother, anticipating my wishes, waited upon me, and requested that either this or any other measure might be adopted if it could afford a chance of relieving her child from the agonies of the operation.

I thought it expedient to try the effects of inhalation the day before the operation; and I am inclined to attach some importance to this, believing that some cases of failure, which have been reported, might possibly have been successful, had such a measure of precaution been used. The little boy was at first rather alarmed, and, from the effects of agitation and apprehension, not able to breathe the vapour well, but by a little gentle persuasion and encouragement he soon succeeded in doing so, and in about two minutes the stupifying effect of inhalation was full and satisfactory. By various little means we assured ourselves that he was unconscious of pain. He was pleased when he awoke, and talked about his nice dreams, and, the next morning, when I went to him, a little before the time appointed for the operation, I found him quite cheerful, and apparently feeling confident that he should not suffer any pain. He said he should not be afraid this time, and that he would breathe it well. He did so, when placed upon the table, without any agitation; but the effects on this occasion were not produced so soon as the day before, which I attributed to his seeing so many gentlemen in the room, together with other feelings which might attend the occasion; but in about four minutes the state of unconsciousness appeared to be complete, and I proceeded with the operation,—amputation above the knee. The limb was removed in about two minutes, during which time not the slightest motion nor sign of sensation was observed; afterwards he became partially awake, and capable of conversation, but still seemed to suffer no pain from tying the vessels and dressing the stump. As on the day before he talked about his dreams, but most distinctly assured us that he had not been conscious of any suffering. All the medical officers of the Infirmary were present, and, with one or two exceptions, all the surgeons of the town, and some others, and every one was satisfied that the power of the vapour had been most fully and satisfactorily shown.

I attach no particular value to the apparatus I made use of, not doubting that many better ones are already in use, and that farther improvements will probably still be made; I merely mention, therefore, that it is a common wide-mouthed bottle, holding about one and a-half pint, fitted with a cork, which is perforated by two glass tubes. One of these, the breathing tube, goes in no farther than just through the cork; the other goes nearly to the bottom of the bottle, its lower end being immersed in the æther, of which about half a pint is required. This tube admits fresh air into the bottle as fast as it is drawn out by the breathing tube; and the said air passing through the æther, becomes strongly impregnated by its vapour. A piece of sponge is fixed at the upper part of the bottle above the æther; an elastic tube is attached to the outer orifice of the breathing tube, and to the other end of the elastic tube, a tin mouth-piece of two parts, one for inhaling out of the bottle, the other for exhaling, the latter tube requiring a simple valve.

I have pleasure in stating that my little patient, is going on in all respects perfectly well.

I am, Sir,

Your obliged and obedient servant,

H. TERRY.

OBSERVATIONS ON THE INHALATION OF SULPHURIC ÆTHER.

By Clement Hawkins, Esq., Surgeon, Cheltenham.

The introduction of a new remedy into the practice of medicine and surgery, at all times attracts great attention; and I am inclined to think many useful remedies often fall into disrepute and disuse, in consequence of the indiscriminate application of them.

Those members of the medical profession who have

had an opportunity of testing the efficacy of the inhalation of the vapour of sulphuric æther, in rendering patients insensible to the pain attendant on surgical operations, appear to have pronounced unanimously a verdict in favour of the discovery of Dr. C. J. Jackson, and Dr. Morton, in America. Such appears to be the case, if we may credit the accounts lately promulgated by the daily press. Dr. Bigelow, in the Boston *Medical and Surgical Journal*, has given a detailed account of the effects of this discovery in numerous cases. I have read carefully some extracts from his paper in the last number of the *British and Foreign Medical Review*, and I cannot consider the symptoms which accompanied the inhalation of the vapour altogether free from danger. In some, alarming cerebral symptoms occurred; one patient became excited, and required to be confined in the chair. "Young subjects are affected with nausea and vomiting, and for this reason Dr. Morton has refused to administer it to children."

A short time since, I witnessed the effects of this remedy on the person of a young medical man, of spare habit. He requested my attendance late in the evening to restrain a profuse hæmorrhage, consequent on the application of two leeches to his gum. I succeeded by the use of pure tannin. He informed me, that two days previously, the crown of a tooth had been broken off, in the attempts made by a dexterous dentist to extract it; this operation was followed by great inflammation, aggravated by exposure to cold; the pain he suffered was almost intoterable. The next day, contrary to my advice, he determined on having the stump removed. I cannot imagine a more painful proceeding, considering the state of the parts on which the operation was to be performed. He requested that I should be present, as he was about to inhale the vapour of æther previous to the attempt being made.

A bladder, with a suitable mouth-piece, &c., was prepared by Mr. Ruck, of the Montpellier Baths, in this town, and the sulphuric æther put in it. The patient proceeded to inhale the vapour; in two or three minutes he became quite unconscious; complete relaxation of the muscles ensued; the pupils were dilated; the pulse small and quick. The dentist, with an elevator, proceeded to eradicate the stump, which broke in the attempt. About one minute was occupied in performing the operation, when he started from the sofa, and commenced dancing and singing, placing himself in a pugilistic attitude, and made a desperate attack on a vapour bath which was standing in the room. The face and neck were much congested, and far darker than I have ever witnessed under any circumstances, the pupils enormously dilated. I must say I was relieved from much anxiety, when I saw the countenance restored to its natural state. I should think the whole period occupied in inhaling the vapour, and the return to consciousness, was not more than five minutes. The pain returned with great violence, and he again attempted to inhale the vapour, which proved a failure. Farther attempts were made to eradicate the offending stump in vain. I recommended him to go home and take a grain of muriate of morphia; in the evening he was free from pain. He informed me that although he felt no pain during the operation, he was not altogether unconscious.

I have thought it worth while to communicate the particulars of this case, and to make these observations on the use of this new discovery, and I hope the members of the Provincial Medical and Surgical Association will give a candid statement in the Journal of the effects of the remedy under consideration. Many I know have already operated under its influence, and it is very desirable we should have their experience faithfully recorded.

Dr. Ware, of Boston, in his letter to Dr. Forbes, in the *British and Foreign Medical Review*, says, "objections may arise, of which we do not dream, and evils may be found to follow which we do not now perceive," The violent gesticulations that ensuedin the instance I have detailed, although of no great importance in an operation unattended by hæmorrhage, would have been of serious consequence in one in which it was requisite to divide large vessels. I feel it would have been almost impossible to restrain the muscular exertions of my friend, who informed me that similar effects follow the inhalation of laughing gas.

If I were desirous of performing an operation under the influence of the vapour of æther, I should certainly make a preliminary experiment on the patient some days before the operation was to be done, and in the present state of our knowledge I should decline using it in cases of accident requiring amputation, &c. In plethoric subjects and in those who have a disposition to cerebral congestion, I should consider the use of the remedy wholly inapplicable.

REMOVAL OF A STEATOMATOUS TUMOUR UNDER THE INFLUENCE OF SULPHURIC ÆTHER.

Eliza Morris, a patient of the Chichester Infirmary, aged 29, the subject of a steatomatous tumour, situated deeply in the left lumbar region, and about the size of a goose's egg, was operated on on the 29th instant, in the presence of several members of the profession, whilst under the effect of sulphuric æther, by Mr. Abraham Duke, senior Surgeon of that Institution.

The patient having been placed in a proper position for the operation, and the nose being closed by an assistant, the inhalation was commenced, and in about six minutes it was quite evident that the vapour had produced the desired effect, (this was indicated by the turning up of the eyes, falling of the eye-lids, a fixed but dilated state of the pupils, the lowering of the pulse, and the total unconsciousness of the patient,) when the fingers were removed from the nose for a few seconds. Mr. Duke then began his first incision, and in three minutes the tumour was dessected out, without the patient evincing the least sign of pain, or any unpleasant effects supervening. At the commencement of the operation she moaned occasionally, and says she felt a slight prick, but not anything like pain; in fact she was not aware of having undergone the operation when placed in bed, twenty minutes after it had actually been performed. It was necessary to make use of six sutures, and although

so many were inserted no pain whatever was then experienced; this was the more extraordinary as she was then talking with those standing around her. No vapour was administered after the removal of the diseased part.

Numerous expensive and complicated apparatus have been invented for the inhalation of the vapour of æther, but in this case nothing but a common inhaler, with that portion of Reed's enema syringe containing the valves, introduced between the vessel and the tube, with an India rubber covering for the mouth, was used, and with the most perfect success. This is another very satisfactory instance of the great benefit to be derived from the use of the vapour of æther, and its valuable assistance to the surgeon in difficult and painful operations.

PERSPIRATION IN FEBRILE DISEASES.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

In your number of January 27th, you report the proceedings of the last meeting of the Bath and Bristol Branch of the Association. In the discussion on fever which then took place, I am made to observe, "that the peculiar odour emitted in cases of fever was given out by the perspiration."

This certainly was the first observation I used, but I employed it merely as the test to introduce to the notice of the meeting, a more important one, to which a long experience in the treatment of febrile diseases had led me,—namely, that the period of infection in fevers and febrile diseases was that in which the perspiration was offensive in its odour.

The exanthemata plainly prove the part performed by the skin in the relief of fevers; we use a portion of the secreted matter to convey their infection; while in continued fever, as I maintain, this infection is propagated by the diseased perspiration, sensible by contact, insensible by inhalation.

I then took a wider range, and in relation to phthisis pulmonalis, said I had seen many cases where relatives previously healthy, and by no means predisposed, had become diseased in consequeace of their sleeping constantly with those affected by it, more particularly relating instances of husbands and wives, sisters, &c. The night-sweats in this disease have always had offensive odour, and are a diseased secretion; and the disease is infectious under this condition—namely, by contact, and not by inhalation, for nurses and others rarely receive it, and it is from this circumstance that it has neither been considered neither infectious nor contagious.

I proceeded farther to remark, that in rheumatism (a specific disease of a febrile character, attended with offensive perspiration,) I had seen relatives in close attendance attacked with febrile symptoms, complete in every respect excepting the specific characters of rheumatism, while *hired* nurses altogether escaped.

This subject, an interesting and highly important one, is worthy of farther investigation, more particularly in relation to the health of the community, and the prevention of disease. I am well aware that many theories have been put forth to account for the contagion of fever and diseases of a febrile character; into these I have no time now to enter; but I would reiterate, that when diseases are accompanied by unhealthy cuticular exhalation, they are more or less contagious,—that the skin is the organ from which infection is received. Leaving the subject for further inquiry, anxious only, that what appears a trivial and tyro-like observation, should be explained by its sequence of practical remarks,

I am, Sir, your obeedint servant,

JAMES TUNSTALL, M.D.

Bath Hospital, January 30th, 1847.

Medical Intelligence.

OPERATIONS PERFORMED UNDER THE INFLUENCE OF ÆTHER.

Among the more remarkable operations performed at the metropolitan Hospitals under the influence of the vapour of sulphuric æther since our last, are one of Cæsarean operation, by Mr. Skey, at St. Bartholomew's Hospital; and one of lithotomy, where the bladder was diseased, and in an extremely irritable state, by Mr. Arnott, at the Middlesex Hospital.

The following are some of those which have been performed in the provinces:—

At Liverpool, at the Northern Hospital, by Mr. Stubbs, amputation of the thigh, for diseased knee-joint; at the Eye and Ear Infirmary, by Mr. Neill, for hard cataract by depression, in two cases, for soft cataract by breaking down the cataract, and for strabismus.

At the Northampton Infirmary, by Mr. Terry, amputation of the thigh.

At Cheltenham, by Dr. Brookes, removal of the breast.

At Sheffield, by Mr. Beckitt, removal of the middle finger and a portion of the hand.

At the Suffolk General Hospital, Bury St. Edmunds, by Mr. Image, removal of a tumour from the breast.

At Lynn, at the West Norfolk and Lynn Hospital, by Mr. T. Bullen, removal of a scirrhous mamma.

At Maidstone, at the Kent Ophthalmic Institution, by Mr. Woolcott, removal of a tumour from the back of the neck; fistula lacrymalis; and strabismus.

At the Newcastle Infirmary, by Mr. Potter, for fistula; and in a case of diseased bone.

At Bristol, by Mr. Lansdown, removal of a cancerous tumour from the lip; of a portion of nail from the great toe; and amputation of the leg.

At Laxfield, Suffolk, by Mr. Beales, for lithotomy.

Mr. Cotton, of Lynn, has employed the æther vapour in private practice. He says,—"In one case the most perfect composure and serenity was preserved, during a painful operation; whilst in a second case, the most boisterous, hysterical-like spasms (as observed by Professor Parker,) followed, requiring all the force of the by-standers to hold the patient; a farther inhalation, however, effected the required degree of unconsciousness, and the operation was completed without the patient's knowledge, or the slightest indication of pain."

In Edinburgh the inhalation of the vapour has also

been successfully employed by Professor Miller, at the Royal Infirmary; and by Professor Simpson, in a case of difficult labour, a notice of which we extract from the *Edinburgh Weekly Journal*:—"A few days ago Professor Simpson stated to his class that he had practised, with entire success, the inhalation of sulphuric æther in a case of the most difficult form of labour, and where, otherwise, the sufferings of the patient would undoubtedly have been extreme. The mother was lame and deformed. At a former accouchement the labour lasted three or four days; and, from the necessarily protracted use of instruments, the patient's agonies were very great. On the present occasion Dr. Simpson had previously determined to avoid, if possible, the use of all instruments, and to attempt to extract the infant by the feet. He expected to be aided in this by the use of the æther inhalation. Accordingly, when labour had set in for a few hours, the patient was put under the influence of æther, and in a few minutes the child was turned and extracted, while the mother was altogether unconscious of the operation, and that, too, although the delivery was rendered excessively difficult, by the degree of compression to which the child's head required to be subjected. On afterwards awakening, or passing from her 'ætherealised' condition to the state of common consciousness, one of the first circumstances of which the patient became aware was the noise attendant on preparing a bath to resuscitate the infant. A remarkable circumstance pointed out in the case by Dr. Simpson was, that whilst breathing the æther the labour pains or throes continued, and yet the mother (to speak paradoxically,) *felt* no pains. We hear she is rapidly recovering, and was dressed and walking about the house on the fourth day, while on her last confinement she could not leave her bed for four or five weeks."

In Paris, operations have been performed under the influence of æther at the Hôpital St. Louis, by MM. Malgaigne and Velpeau, and at La Pitié. The following is an extract from a private letter, in reference to the practice:—

"Operations have been lately performed upon four patients at La Pitié under the influence of the inhalation of the vapour of sulphuric æther: three of the cases succeeded most satisfactorily, but in the fourth, the usual pain was felt, owing, it is supposed, to the patient not having inhaled a sufficient quantity of the vapour. There are discussions here and differences of opinion, as to the propriety of using this prevention against pain, and the general impression is, that it is inadmissable in cases where violent re-action and excitement of the circulation would be dangerous after operation. Farther experiments, however, are to be made, and the matter is likely to be referred to the Academy of Sciences."

DEPUTATION TO SIR GEORGE GREY.

On Friday, the 5th instant, a Deputation from the Council of the National Institute of Medicine, Surgery, and Midwifery, was hououred with an interview by the Right Honourable the Secretary of State for the Home Department.

MEDICAL APPOINTMENTS.

James Paget, Esq., of St. Bartholomew's Hospital, has been appointed Profossor of Anatomy and Surgery to the Royal College of Surgeons, in the room of Mr. J. F. South, resigned.

Dr. William Pulteney Alison has been appointed First Physician to Her Majesty the Queen, in Scotland, in the room of Dr. J. H. Davidson, deceased. Dr. Robert Christison has been appointed one of Her Majesty's Physicians in Ordinary, in Scotland; and Dr. James Yarde Simpson has been appointed Physician Accoucheur to Her Majesty, in Scotland.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, February 7th, 1847:—R. A. W. Westley; J. K. Baines; W. S. Briggs; E. Govett; J. L. Palmer; J. Harward; M. Morris; C. Downes.

HUNTERIAN ORATION.

The Hunterian Oration will be delivered on the 14th February, in the Theatre of the College, by Joseph Henry Green, Esq.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, January 21st:—George Wilmshurst, Warwick; Wm. Sutherland Meek, Nantwich.

OBITUARY.

Died, January 8th, aged 66, James Ferris, Esq. Surgeon, Truro.

January 15th, at Calais, at a very advanced age, Midford George Leroux, one of the oldest members of the College of Surgeons. In early life he was Staff-surgeon in India; but his love of travel induced him to leave the service and visit countries in all quarters of the globe. About forty years ago he settled at Clifton, near Bristol, where his varied attainments soon secured an ample practice. Becoming the subject of asthma, he withdrew from professional life and resided chiefly abroad; but his zeal to keep pace with the progress of science was unabated by physical infirmities, and he preserved to the last the character of an accomplished surgeon and gentleman.

January 22nd, at Burton-on-Trent, aged 76, John Spender, Esq., M.D.

January 25th, at Denmark Hill, Surrey, aged 27, John Buxton, Esq. M.D.

Jan. 30th, at Ryde, aged 44, A. T. S. Dodd, Esq., Surgeon Extraordinary to Her Majesty, formerly Surgeon to the Infirmary, Chichester

Feb. 2nd, at Bristol, aged 89, Gawen Ball, M.D.

Lately, Isaac Raines, Esq., M.D., Burton Pidsea, near Hull.

ERRATUM.

Page 52, col. 1, line 9, for Dr. George "Robinson," read Dr. George "Johnson."

TO CORRESPONDENTS.

Communications have been received from Dr. W. P. Brookes; Dr. Jeffreys; Mr. G. F. Wills; Mr. Banner; Mr. A. Napper; Dr. Cullen.

PROVINCIAL
MEDICAL & SURGICAL JOURNAL.

A LECTURE ON PUBLIC HEALTH.

By Charles Hastings, M.D., F.G.S., Physician to the Worcester Infirmary.

(Read before the Worcestershire Natural History Society, January, 1847.)

The importance of paying serious attention to the questions which are involved in the consideration of public health cannot be well overrated; the most casual observation must shew us that we are continually affected by the objects which surround us, and that it has pleased the Almighty to place us on this earth for a brief season, and that our life, and health, and happiness, are day by day dependent on a variety of circumstances, over which it has pleased his Maker to give man some degree of controul. The health, therefore, and length of life of any community are in some degree dependent upon the adaptation of their existence to the laws by which it has pleased Providence this world shall be governed.

The volume of Nature lies open to all, and especially to the medical philosopher; in all regions he is excited to peruse her pages, to interpret her language and explain her laws. In the expeditions, whether of discovery, war, or commerce, made to remote parts, and to every climate of this earth, we see the utmost variety in the condition of mankind. It seems to me that a spirit of inquiry into the actual phenomena going on in this globe is congenial to man, and this disposition should be encouraged and directed to the acquirement of a more precise knowledge of every country and people.

If, in the small space occupied by Great Britain, no variation of climate, properly so called, is to be found, some difference of temperature certainly there is between the coasts of Cornwall and the bleak hills of Cumberland; some diversity of elevation and depression of surface from the summit of Snowdon to the low lands of Cambridgeshire. These accidents of situation, connected with habits of life, influence health in no inconsiderable degree. It is a popular notion that the greater the elevation the more perfect the state of health. The mountaineer is commonly characterized by a robust energy of frame and length of days, denied to the inhabitants of vallies. But the scientific inquirer will refer to a number of circumstances to account for this privilege. This happy state of exemption or partial exemption from disease, will depend much on modes of life;—on diet, exercise, and temperance;—on employments, whether sedentary, manufacturing;—solitary or gregarious;—mining, chemical processes, or agriculture. But all experience goes to establish the fact that a country life is more favourable than a town life to health and longevity.

The question which modern science has to solve is, whether there is not some means by which the unhealthiness of the inhabitants of towns may be averted, and by which they may be placed in a similar position, as to the duration of life, as their, in this respect, more fortunate brethren in the country.

Mr. Chadwick, whose practical experience in the inquiries which have relation to public health is very great, thus speaks to this question in his report to the City Commissioners of Worcester:—

"There appears to be no sufficient reason for not believing that it is within the reach of practical measures to bring the health of the population of Worcester, up to that enjoyed in Tenbury, Martley, and Upton-on-Severn.

"Now, what is the loss of health and life in Worcester as compared with the loss of life experienced in the Tenbury district,—a district not freed, as many public establishments are, from the ravages of epidemics, and therefore not affording a very high standard!

"According to investigations, founded on the largest experience, the proportions of the deaths of infants to the deaths of adults, are the best tests of the sanatory condition of a population, because infant life is the most dependent on atmospheric purity, because the infantine mortality is the least affected by the migration or emigration, or the occupations of the adult population.

"Now, it appears from the Registrar General's annual return, that whilst out of every hundred children born alive, at Tenbury, and the surrounding district, eleven died within the year of their birth; at Worcester, no less than twenty-one died within the year of their birth. Had this increased rate of mortality at Worcester during that year, been in the same proportion as in the Tenbury district, there would have been 151 deaths fewer; if the rate of births had been at the same rate as in the Tenbury district, there would have been 35 births fewer to make up the deficiencies of the increased mode of mortality. In the latter district, the average age of all who died was 41 years and four months, and the average age of all the adults, all above twenty, who died during that year, was 59 years and six months, or nearly three-score years; whilst in Worcester the average age of all

who died was 33 years and four months only; and of all who died above the twentieth year, 56 years and seven months only. Upwards of 31 per cent. were cut off in the prime of life before the natural and insurable term as ascertained in the adjoining district,—that is to say, between 20 and 60 years of age. One with another, each adult who died during that year, lost two years and eleven months of healthful life and working ability, as compared with the durations of adult life in the Tenbury district. The loss of life lost to each individual in Worcester is, therefore, not less than eight years; in other words, supposing that the same proportionate rates of mortality obtained in Worcester as in the Tenbury district from year to year, as there is every reason to believe there would, then the duration of life to every individual born and reared in Worcester, is one fifth less than it would be."

During the whole course of my medical life, and my residence in this city, which now extends to nearly thirty years, the question of the state of the public health of its inhabitants has repeatedly engaged my attention, and it will, I am sure, be in the recollection of many members of this Society who now hear me, that I have, on several occasions, pressed it on their notice. Happily I can now do so under more promising circumstances than formerly, for the endeavour to improve the social condition of the town-population is no longer confined to individual exertion. I may congratulate myself and you, that what a few years ago was almost confined to a few members of the medical profession, has now become a national movement, and that the Government of the country, seeing the immense importance of the improvement of the health of towns, have issued commissions of inquiry, and have thus obtained a great mass of valuable information, which will enable them to legislate with security on this complicated and difficult subject.

Besides which, associations have sprung up supported by the most influential of our countrymen, having for their object the exposition of the causes which operate so injuriously in our large towns, not only on the health and longevity of the inhabitants, but also on their religious and moral improvement, for it cannot be doubted that an incalculable amount of demoralization is attributable to the same causes.

It is, however, a great mistake to suppose that either the possession of wealth, or immunity from labour, are the points which make the difference in the degree of health. The rich man's abundance may expose him to as many diseases arising from excess or indolence, as those which beset the poor man owing to hard fare or scanty clothing. Let the labourer but have a decent house built on a dry soil, well drained, and with all its putrefying refuse properly removed,—let his dwelling have at least two bed-rooms above the ground-floor, and let it have a good supply of pure water and fresh air, and there is evidence to show that he is as likely to enjoy health and length of life, supposing that similar attention is paid to the place in which he does his work, as the most wealthy of his employers. The truth of the above remark has been amply attested by the Report of the Health of Towns' Commission, and it is highly encouraging, as proving that the evils of poverty and sickness which at present weigh down our town-population, admit of great amelioration if the means applicable thereto be philanthropically and energetically employed.

I shall not, however, indulge farther in any general remarks, but engage your attention in considering very briefly some of the circumstances in the city of Worcester which have reference to the public health of the inhabitants. The city of Worcester is one of the most ancient in England, and some of its buildings, although they attest its antiquity, are on that very account not very favourable to health. Its situation is inland, the distance from the nearest sea-coast being about sixty miles. The elevation of the city at the Cross above the sea, is about seventy feet, and the elevation at the Cross above the bed of the Severn is about forty feet. This elevation extends along High Street and Foregate Street, and is to be noticed as affording the opportunity of an easy drainage of a great part of the city into the Severn. The relation of the river to the city is particularly worthy of attention; many of the houses are built upon its banks, and we have now a rapid flowing stream, eight feet deep, continually assisting, by creating a current, to ventilate the streets, and to carry away all impurities. The late improvement of this noble river appears to me highly favourable to the health of the inhabitants, as substituting a full rapid stream for what was formerly in many parts, for portions of the year, little better than a stagnant ditch, with many impurities during the summer season decomposing in the bed of the river. It is much to be regretted that many houses are built upon land liable to be inundated by floods, for not only are the inhabitants of those houses subject to great inconvenience, but I fear on many occasions their health suffers severely.

The appearance of the principal streets of the city is striking, and they are broad and wall paved; but almost all the minor streets, especially those between the High Street and the river, are narrow, and deficient in cleanliness and ventilation.

I may say also, that there has been great inattention to the health of the inhabitants, in fixing upon insalubrious portions of ground for building upon. That portion of the city called the Blockhouse, was, until lately, positively an undrained marsh; and the sickness that for some years prevailed among the inhabitants was very great; but a few years ago an act was obtained to improve the drainage of this locality, and a large sum of money was expended in a culvert, which has greatly improved the land, and has also tended to lessen the mortality of the inhabitants. As on all similar occasions, where it has been necessary to make a rate for raising money for such purposes, a great outcry was made against the promoters of this public improvement; but, independently of every other consideration, the public funds have been benefitted by this outlay, inasmuch, as many a father who would otherwise have met an early grave, by fever or other disease, has been spared to bring up his family in comfort, instead of leaving them a burthen to the

parish. It were well if the system of drainage throughout other parts of the town were as efficient; but I am sorry to say that the substitution of cesspools for drains is a prevalent custom. This is indefensible, for the situation of the greater part of the city is well adapted for perfect sewerage.

I can quote the high authority of Mr. Austin in favour of the advantageous position of Worcester, in respect to drainage. In his very valuable report made to the City Commissioners he says, "The city, moreover, whether fortuitously or not, is so constructed as to present an opportunity, rarely if ever met with, for obtaining a most perfect system of sewerage, without difficulty of any kind, and at comparatively trifling cost, if properly and comprehensively laid out. So much indeed was I struck with this peculiarity, that I would almost venture to state it as an impossibility, that any town in the kingdom could present an equal area that could be more adequately sewered at less cost. For the most part substantially constructed, the thoroughfares are laid out in good and direct lines, the main traversing the thoroughfare—the continuous line Foregate Street, Cross Street, and High Street—forming as it were the ridge or hog's-back of the whole city, from which the diverging thoroughfares, short and at frequent intervals, fall in both directions with ample declivity into lower grounds, which have their outlet in the river Severn."

When we consider that even of late years some of those who have erected houses and buildings in this city have, in many instances, paid scarcely any attention to have the site healthy, and the houses after they are erected well drained and ventilated, we cannot but anxiously hope that the expected legislative measure will contain some compulsory provision under which all future buildings shall be, as far as possible, provided with these necessary requirements, and also some security against the crowding together of large masses of the community in pent-up cellars and other unsuitable dwellings.

But, in looking at the condition of the habitations as affecting health, the transgression of its laws is by no means confined to those inhabited by the poorer classes. Many of the country houses in England are surrounded with circumstances unfavourable to health. They are not uncommonly placed on a gentle acclivity, on the edge of a marsh, and, for the sake of the prospect, exposed on that side, although it may be the east or north; whilst on the other side, where the ground rises, and is more diversified, they are thickly enclosed by trees, frequently being laid open on one side to malaria, and fenced in on the other by hills, woods, shrubberies, garden hedges, or high walls and stables. They become perfect boxes of malarious influences, and are either repeatedly visited by fever, or are the unsuspected cause of declining health of several individuals of the family, for malaria when it does not produce fever, seems in numerous instances slowly to derange the digestive functions, and gradually to undermine the whole health.

After this digression, regarding country houses, I shall not at present farther remark on those circumstances which affect the public health of the inhabitants of Worcester, but I shall now adduce some records of the population of this ancient city, so as to make a comparison between the mortality of late years and that which prevailed in earlier times. In doing this, however, we shall find difficulty in going far back to make any safe deductions, for I have no doubt you are all well aware that our population returns previous to the year 1800 are very imperfect. Since that time a census has been taken every ten years, and from these public documents accurate information may be gleaned; besides which, within the last few years, the Registrar General has published quarterly statements of the mortality in different districts, which will go far in after-times in pointing out the tainted spots, and show in what parts of the kingdom certain diseases destructive of our population most prevail.

The population of Worcester previous to the year 1800 is very inadequately reported. We possess the aggregate number of the inhabitants for two or three distant periods, yet, on this number we cannot depend with any certainty, for if we apply to the parish registers wishing to discover the rate of increase or decrease, such is their incorrectness and incompleteness, that all reasoning from them would be inconclusive.

The whole population of Worcester is stated by Bishop Sandys, during the reign of Queen Elizabeth in 1563, to have amounted to about 10,025, and this population being contained within the old city walls must have been very crowded. We are not then surprised to find that in the following century in 1646, disease had thinned them considerably; and this was found to be the case, for in that year, when the Parliamentary forces surrounded the city, the population only amounted to 7176, and even when the garrison and train bands were added, the numbers were little more than 9000. In those evil and troublous times, we cannot be surprised that the population retrograded. A check must necessarily have been put to trade and manufacture, and the sword did its part in slaying many of the most vigorous of the population. There is no question that the oscillation of the woollen manufactory, once employing so large a portion of the population of this city, had much to do in by-gone times in causing a fluctuation in the number of the inhabitants. In the plan of the city, published by Mr. G. Young in 1779, he gives the number of the inhabitants at 13,104, being an increase of 5000 since 1646, and of 3000 from the reign of Queen Elizabeth.

When we come to the population returns in 1800, we find the population including the suburbs amounting to 13,589; in 1810, to 19,759; and in 1821 to 25,834. In the returns for 1831 and 1841 there has also been some increase, but during the last twenty years there has been a less rapid increase of the population, owing probably to the generally depressed state of the glove-trade, which formerly engaged large numbers of the population. The number of the inhabitants in the city and immediate suburbs of Worcester, does not now, I believe, reach 30,000; so that whereas, from 1800 to 1820 there was an increase of 12,000 in the population, from 1820 to 1846 a

period of twenty-six years, it has not increased more than 4000. It may here be remarked, that the number of houses, in proportion to the inhabitants, has increased since the commencement of the present century, and we may therefore infer that the population are much better housed than they were during the last century.

This certainly is favourable to health, and it is evident that this, with other causes, has been latterly operating so as to improve the public health of Worcester; for this increase of population appears rather to have arisen from the decrease of the number of burials than from any other cause. I infer this from the facts exhibited by the population returns for the last forty years. In the beginning of that period the ratio of burials to the whole population was much greater than at present. The ratio stands thus for the three first decennial periods. In 1801 it was as one to thirty-two. In 1811 as one to forty three. In 1821 as one to forty-eight. Mr. Chadwick, for 1841, makes it as one in forty-four, but again in 1845, according to the returns of the Registrar General, the deaths were as one to forty-eight, taking the population at 28.000.

This result is encouraging, as shewing that since the commencement of the present century, although Worcester is larger and contains nearly double the number of inhabitants, it is become more healthy and more favourable to the prolongation of life. To whatever cause this is to be attributed the fact is such, and it proves that this city exhibits bills of mortality, in which the average number of deaths is smaller than in most other cities of the same population.

If we consider this circumstance in its true light, it is very encouraging to perseverance in the philanthropic efforts that are now making to improve the health of towns; for there was a period not far distant, when Worcester was particularly subject to fever, and in looking into Green's "History of Worcester," you will find that during the two last centuries pestilences have repeatedly visited the city, and have carried off large numbers of the inhabitants. My old and respected friend, Mr. Rayment, who practised for half a century in Worcester, thus writes in relation to the prevalence of fever:—"In 1781 the city and suburbs of Worcester were reported much subject to fever. If we consider the wretched state in which many of the lower classes of the inhabitants then lived and were crowded together in the remains of the former clothing manufactories, the neglected state of the streets in which these dwellings were situated, the open state of the drains in the best streets, the frequent stagnation of their contents giving rise to an impure state of the atmosphere, and these impurities increased by large quantities of decaying animal matter proceeding from the glove manufactories, it appears very probable that these local circumstances made more active the sources of fever." Now, it is desirable just to contemplate the altered state of Worcester as respects health since the time above specified. In 1781 we have the most undoubted evidence that about one out of thirty of the inhabitants died annually. At the present time only one out of forty-six of the inhabitants die annually. Now, let us ask, to what is this improvement owing? I answer, to the exertions that have been made to improve the health of the city.

Credit is due to the City Commissioners for many improvements in the sanatory state. Imperfect as our drainage still is, we have no open drains. Nuisances, although prevalent, are not so noxious as formerly.

The inhabitants too are now better lodged and clothed than formerly. Upwards of two thousand new houses have been built within the last forty years; and although too many of them have been placed in unhealthy spots, yet the manner in which the rising grounds surrounding the city are now studded with single houses and rows of houses, shews that attention has been paid to erect dwellings for the rich and poor, in the elevated, dry, and airy situations. But much remains to be done before this city is placed in the position as to its public health, which it may occupy, if due exertions are made to carry out those sanatory measures, which I verily believe will, at no distant period, be adopted by the legislature. I shall therefore conclude by offering some suggestions as to the nature of the improvements to be wished for.

First, then, I shall mention as deficient, the supply of river water. With so noble a stream passing so close to us, every poor man, as well as every rich man, ought to have an abundant supply of water. Every sanatory consideration points out this as desirable; and fortunately, modern science has shown that this may be done at a very reasonable rate. At Nottingham an abundant supply of water is afforded to each workman for a penny a week. I wish it was so with us.

How indispensable too are baths to the health of a large community; and yet, hitherto, how ineffectual have been the efforts of those who in Worcester have advocated their establishment! So listless indeed have my fellow citizens been in this matter, that I verily believe no public baths would have been established in our day if an act of Parliament had not come to our aid, by which instrumentality we now hope it will be accomplished.

With regard to the water of Worcester supplied from the wells, such is the prejudice entertained against it by some individuals, that you might suppose it was the source of much disease. This, however, is not borne out by facts. Worcester, as you are doubtless aware, is built upon gravel, and the stratum of gravel varies in depth probably from ten to twenty feet; immediately under the gravel lies the red marl or new red-sand stone formation, in which a considerable quantity of lime is found. It follows that the water percolating through the marl becomes impregnated with the salts of lime, the lime being found in combination with the carbonic, sulphuric, and muriatic acids. The incrustations on the pipes used for conveying water, and on the tea-kettles used for boiling it, consist principally of carbonate of lime, and attest that the water holds a large quantity of lime in solution, or so much of it would not be so readily deposited. On evaporation I have found many grains of this earthy-saline deposit in a gallon of water. Dr. Lyon Playfair states the amount

to be as much as fifty grains in a gallon, and I have not found the quantity vary much in several specimens taken from various parts of the city and suburbs. The so-much admired water at Henwick Hill contains a large portion of solid contents, and the circumstance of its containing a large impregnation of carbonic acid gives it the freshness for which it is admired.

The water in Worcester is improved of late years by the deepening of the wells. Until within the last few years most of the wells were only about fifteen feet deep, and the inhabitants were dependent upon the springs in the gravel for the supply of water, which, from the shallowness of the wells, was often mixed with impurities. Since the large drain in the Blockhouse was made, many of the superficial wells have become dry, and this has compelled many persons to sink into the marl for a spring of water. This, although productive of inconvenient expense, to many parties will be found of benefit, by giving a more abundant supply of water.

On the whole, then, I can dispel the alarm of those who are afraid of the water of Worcester directly causing disease by its saline impregnations; but a great evil results in an economical point of view. So hard a water is scarcely applicable for washing purposes, and it is also objectionable in tea-making, and for culinary purposes. I think it right, however, to warn you of a danger of another kind, arising from the prevalence of the custom of using lead for vessels holding water, and for pipes conveying it. This custom of using leaden pipes for conveying pump water has been, in some degree, sanctioned by science. It has been asserted with truth that water containing saline matter does not readily dissolve lead; but facts are stubborn things, and so far back as the time of Dr. Wall, that distinguished physician pointed out instances in Worcester where leaden pipes had been corroded by the action of the water.

This subject was taken up at the late meeting of the British Association, at Southampton. Mr. Osborne adduced facts to prove that it is desirable to avoid the use of lead in cisterns for receiving water, and also in pipes for conveying it. The result of his experiments seems to show that the presence of chlorine in the water of the New Forest is one cause of that water dissolving the lead. He also discovered other solvent principles.

Now, I have reason to believe that the Worcester springs of water not only contain chlorine, but also carbonic acid; and practically I find my suspicions of lead being dissolved by many of the springs of water in Worcester, confirmed by inquiries amongst the plumbers. They tell me that the leaden pipes connected with some of the wells of water remain for years, and are not at all corroded; whilst there are many of the wells of water that are so actively solvents of lead, that they are not unfrequently called upon to repair pipes which are corroded by the action of the water upon them. It is fearful to think that this lead so dissolved is carried by means of spring water into the human system, and becomes the source of insidious and intractable diseases; such diseases often elude the skill of the physician from ignorance of the cause which has produced them. It behoves, therefore, all who value their health to consider this, and if they have leaden pipes or leaden cisterns for their spring water, to ascertain, without delay, whether it is of such a nature as to dissolve the lead.

As the over-crowding of the poorer houses in a city is a frequent cause of disease, we should endeavour to improve Worcester in this respect; for although the number of inhabitants to each house is diminished since the commencement of the present century, being now not quite five to each house, and although many new houses have been erected for them, containing better accommodation, and are better situated as to dryness, warmth, and ventilation, yet those inhabitants who live in the old parts of the town, which were formerly the seat of the woollen manufactories, are not well provided with means of removing the filth which accumulates in them. The lodging houses especially are very dirty, and the average number of inhabitants is excessive, and the means of ventilation are very deficient; so that the effluvia and other causes here operate with intensity, so as in seasons of predisposition to this class of affections to be productive of contagious diseases. The mode in which the streets are laid out—their width or compactness—their pavement—their drainage—their exposure to the sun and to the wind, are considerations of much importance. The difference of a few paces may make a very considerable difference to the health of the inhabitants; thus at Rome, certain streets, nay, certain parts, sides, and even houses of some streets, are more damp, chilly, and exposed to the malaria than others. Certain parts of our own city have, until lately, been remarkable for fever; the Blockhouse-fields especially so, until the large drain was constructed. There are again other parts of Worcester where the dwellings are very old, and masses of building are accumulated together, which prevents ventilation and the access of the solar influence. There is no doubt that the inhabitants of these parts would be more healthy, if many of the old walls and masses of houses were pulled down, and thus open spaces occasioned where the air may circulate more freely, and as it were, percolate these districts.

I have no improvement, except as to drainage, to suggest in our principal streets; they are wide and well ventilated, and whenever a gust of wind comes it thoroughly perflates them, and removes impure exhalations. These exhalations, I am sorry to say, often arise; for the drainage, even in our principal streets, is yet very imperfect. The sewers, if they can be so called, are superficial, and are not constructed on any general and comprehensive plan. All this must be remedied before Worcester can derive, in point of health, all the benefit for which its natural situation appears to have destined it.

Mr. Austin, in his report to the City Commissioners, has submitted to the city a proposition for a most effectual system of sewerage, by which most of the evils arising from deficient drainage we have so long had reason to complain of, may be removed. Great

indeed, therefore, will be the disappointment, if the faithful city should not arouse itself, put forth all its energies, and carry out this necessary hygienic improvement.

There are several other points to which, if there were time, I should allude more fully, but to which I shall now only cursorily direct your notice. It is placed beyond all contradiction that the state of the grave-yards within our cities is a frequent source of disease, and Worcester is open to this evil. The difficulties that have opposed themselves to better sanatory arrangements in this respect are great; but let us hope that cemeteries without our cities may gradually become the approved mode of sepulture by all classes of the inhabitants, and we shall then reap the reward in improved public health.

The slaughtering of animals is another evil which calls for a remedy, as does also the keeping of animals, as horses, pigs, dogs, &c., which a better system of police would render less noxious to the inhabitants.

The clothing and diet of the humbler classes are of much importance. Worcester is not subject to those great vicissitudes to which large manufacturing towns are liable, and consequently the labouring population are not so much affected by them, their prosperity never being very great nor their adversity so appalling. A corresponding condition of their food and clothing is the result.

Vegetable food and tea are in great request, and the failure of the potato crop has been a source of difficulty. I shall not, however, here dilate upon this, but I may remark, that the causes producing disease in the vegetable kingdom, seem also coincidently to have affected the animal. Epizootics amongst horses and cattle have been observed in many places, and the reports of the Registrar General for 1846 shews an increase in the mortality, so that in fact, whilst we are planning and considering what can be done to diminish the insalubrity of towns, Providence sends a visitation which tells us that all our endeavours without his concurrence are vain. For some years past there was reason to believe that the causes of mortality in towns were less operative. The Registrar General in his report for 1845, says, in the last three years the price of provisions was cheaper, the commerce and manufactures of the country were more active, the relief to the destitute more liberally administered, and the wages of artisans higher; and all these circumstances favourable to public health undoubtedly contributed to the reduction of the mortality observed. In the midst, however, of all these pleasing prospects, in 1845 and 1846 there is a visitation of a blight in the potatoes and other vegetable productions,—and what is the result? Why in 1846 epidemic disease to a considerable extent prevails in the three kingdoms; the mortality has increased, and in many parts has been one fourth, and one third, and in some instances double the amount of former years.

Worcester has been leniently visited, and the epidemic affection has been lighter than in many parts, qut still enough has occurred to show that epidemic visitations will come, and that they fall most heavily where the laws of public health are most neglected.

This, then, is our encouragement. Providence puts within our power certain means of prevention. We know them. They are plain before our eyes. Shall we, then, be indifferent to these things? Is our life so long that we can afford to lose a considerable portion of it by neglect? The future must answer these questions. Hitherto indifference to these matters has been abundantly evident amongst all classes.

I feel that I have occupied more time than the nature of these meetings will well allow, but you will excuse me if I have delayed you too long, when you consider that the subject on which I have been addressing you is one in which, as Christians, and as men, we are all deeply interested; for however great may be the honours of those who by brilliant exploits add to the glory of their country, few will deny, that those deserve well, and contribute to her political welfare, who add to the health and happiness of the poor, who are always the mass of the community. Depend upon it, whatever tends to exalt *them* in the scale of moral and rational creatures, tends also in the same degree, to exalt the nation, of which they must always form the largest part in political power.

None but those who are in the habit of mingling with the lower classes can have a notion of the intimate connection which exists between physical and moral degradation. From religious motives alone *then* we may insist upon the necessity of endeavouring to improve the condition of the poor, and we should never weary in our efforts to induce the Legislature to devote their energies to this matter.

THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(*Fourth Series of Experimental Researches.*)

By William Addison, M.D., F.R.S., Malvern.

(*Continued from page* 62.)

III. Embryo and Adult Textures.

The microscopical researches of Dr. Martin Barry and others have established the fact, that the first texture of the human embryo and its appendages is *corpuscular*, or incoherent cellular,—that is to say, a texture composed of cells or corpuscles, which have exceedingly thin walls, are very soft and brittle, having but a slight coherency. These cells have many analogies with the cells of the cellular textures of vegetables,—with the protoplasma cells of Mohl, in preceding all the solid formations, and containing a viscous colourless mass, mixed with granules or molecules, and with the incoherent chlorophylle cells of a leaf, in containing a material essential to the growth of the future and more important parts of the structure, in both cases, the material being a secreted or elaborated one.

When the embryo is growing, the transparent membrane or *amnion* formed around it is first

corpuscular, then *coherent cellular*, and then *fibrous*; and the walls of the blood-vessels ramifying upon it, undergo the same changes; they are first *corpuscular*, then *cellular*, and lastly *fibrous*. This then is the order of the morphology, in respect of the membranous envelopes of the embryo,—viz., first corpuscular, then cellular, and then fibrous. In the embryo itself, a month or five weeks old, and half an inch in length, several textural groups, representing the head, eyes, and extremities, the spinal column, liver, and heart, may be discriminated. All these groups, when examined with the microscope (700 linear,) are found to consist wholly of incoherent cells or corpuscles, soft and easily separable from each other; and they are all filled with a *protoplasma*, a viscous colourless matter, mixed with molecules. At this early period, nothing resembling a coherent cellular texture can be found; all is soft, pulpy, and brittle; there are neither blood-vessels nor fibres, nor can anything hard or coherent, resembling cartilage or bone, be detected. When the embryo is four months old and seven inches long, the brain, liver, &c., are groups of corpuscular texture,—soft, brittle, and incoherent. In the lungs, nothing resembling the adult pleura can be dissected, even with the utmost care, from their surface; and the thinnest section that can be made, gives (with a microscopic power of 700,) a coherent cellular texture, mingled with the isolated cells of an incoherent texture. The skin, both epidermis and cutis, viewed with a power of eighty diameters, exhibits a great number of *small dots* or granulations, and so likewise does the pericardium and the other (will-be) fibrous membranes. These granulations, when more highly magnified (700,) are found to be groups of coherent cellular texture, and the whole texture exhibits the same character. The young hair upon the head is very clearly a coherent cellular texture; the heart is a mass of elongated coherent cells; and it is only in the pericardium and other analogous strong membranes that waved fibres have yet appeared. The muscular fibrillæ are more advanced, and have their transverse markings; but nothing resembling nerve-fibres (properly so called,) can be detected, though cells with long projecting tubes, filled with a molecular matter, may be seen mingled with others, especially in the embryo texture of the spinal cord. In the bones of the cranium, the nascent osseous cylinders exhibit small, bony, or hard, cell-like particles, dispersed in a semi-transparent matrix, surrounded and enveloped on all sides in a very vascular fibro-cellular texture.

In the fœtus at birth, the soft corpuscular textures have assumed nearly their permanent characteristics; but this is far from being the case either with the fibrous, cartilaginous, or osseous textures, corpuscles or cells being still the most abundant elements in the fibrous textures, and largely mingled with the young fibres of the walls of the blood-vessels.

During infancy and youth all the later-formed textures are undergoing different phases of metamorphosis, until the adult period or permanent form is established. At the adult period the permanent textural form of the grey portion of the brain, of the liver, the intestinal villa, and the plexus choroides, &c., is *corpuscular*,—a soft, brittle, tender, and incoherent cellular texture. The parenchyma of the lungs is *coherent cellular*. The areolar textures, the dura mater, pia mater, pericardium, &c., *fibrous*; and, without making special reference to nerve-tubes, and muscular fibrillæ, there are also *fibro-cartilaginous, cartilaginous, and osseous textures*.* But, as all these textures were at first soft, brittle, incoherent, and corpuscular, the permanent form of some textures; then coherent-cellular, the permanent form of other textures; then fibrous, fibro-cellular, and cartilaginous, the permanent forms of others; and then osseous; so therefore it is concluded, that *the law of the metamorphosis in the human structure is from soft, semi-fluid, incoherent, corpuscular textures, to the coherent cellular; from these to fibrous, fibro-cellular, and cartilaginous; and lastly to bone.*

I am not aware that there is any difference of opinion among physiologists as to the general order in which the textures of the human structure appear, and I presume they are ready to admit that soft and but slightly-coherent cellular or corpuscular groups, precede the coherent cellular textures; that the cellular precede the fibrous and cartilaginous, and the cartilaginous precede bone. They are at least agreed upon the analogous fact in vegetable structure, "cells containing a viscous colourless mass mixed with granules everywhere," as Mohl observes "preceding the first solid formations."

In the human embryo then, the primary metamorphoses, out of which the future textures arise, take place in groups of corpuscular texture, before any circulating blood, or any blood-vessels can be detected; and the singular variety of the metamorphoses, even in a single organ, may be judged of from the structures of the eye. At this early period, it is by investigations with the microscope in the midst of these corpuscular groups, that the primary changes must be sought; but when blood-vessels or rather blood-channels are visible, and there is blood, a cellular or corpuscular fluid circulating through them, it is then along the inner margins of their walls that the nature of the subsequent metamorphoses,—those which establish the form and quality of the adult organs,—must be looked for.

The growth of the textures of the human embryo prior to the circulation of a current of blood-cells, is

* These are the broad distinguishing types of the textures, but there are many of a mixed character; the pleura is fibro-cellular, and the mucous texture of the air tubes is fibro-corpuscular.

in every respect analogous to the growth of the vegetable embryo prior to the formation of a green leafy parenchyma. And, as in the human structure, the blood current is essential to continued growth and future textures, so likewise in the vegetable structure, in the leafy parenchyma, and moreover, as vegetable structures are disposed to revert to a leafy parenchyma, so an analogous disposition will be shown to exist in animal textures.

IV. Structure of Blood-vessels.

The anatomical or structural elements of the *adult* blood-vessels, as long as their course lies embedded in a fibro-cellular or areolar texture, and whilst merely transmitting the current of the blood, although varying a little in different places, still uniformly consist of sundry layers of fibrous and fibro-cellular textures, the fibres in some of the layers being enlarged longitudinally, parallel with the course of the vessel, others circularly, passing around the vessel. The fibres are thick and strong, especially the outer layers, in proportion to the size of the vessel, or of the column of blood it conveys; and they inclose in their interstices, and are firmly united with, the nuclei of cells, and with a vast amount of granular and molecular matter, sometimes mingled with globules of oil or fat. In the very small branches of the blood-vessels, those which are on the point of leaving the fibro-cellular texture interposed between the lobular subdivisions of the various organs, and which are therefore approaching the scene of the nutritive function, the vascular walls or coats of the vessels are less fibrous; and it is evident from a careful examination, that they more and more partake of forms that are identical with those which constitute t he parenchyma or special texture they supply; until at length in the true nutrient or capillary channels it appears to be impossible to discriminate (certainly it is impossible to observe any *practical* distinction,) between the elements of the parenchyma and the walls of the vessels. Two textures easily examined, may be instanced in illustration:—In the pia mater the walls of the vessels are fibrous,—a transparent *fibrous* parenchyma or membrane; in the *plexus choroides* they are *corpuscular*,—a *corpuscular* parenchyma.*

But, as all the various textures, from the beginning in the embryo up to the period of birth, and from birth to puberty, are gradually ascending to their permanent forms, some reaching it soon, others later, so therefore the elements of the walls of the blood-vessels, and particularly those of the nutrient vessels, vary not only in the different organs, but in the same organ, *pari passu*, with the morphological evolution,—that is to say, in other words, they vary with the age of the organism, differing in the same place in the infant from the embryo; in the child from the infant; and in the adult from the child.

V. Structure of the Lungs.

The air-cells of the lungs are not indiscriminately thrown together in the interior of the organ; on the contrary, they are symmetrical with the branches of the air-tube, and collected or associated in numerous small communities or groups, each group forming what is termed a lobule; many lobules grouped together form a lobe, and five lobes form the two organs called the lungs. A pulmonary lobule is a perfect respiratory organ in itself, the whole lung being but a series of reduplications of the same structure—an aggregate of lobules. At one of the corners or angles of a lobule, a division of the air-tube, and an arterial blood-vessel enter into its interior, and at the same place a vein comes out, and by these three cylindrical structures the lobule is connected with its fellows. The membrane which forms the walls of the air-cells, constitutes the *parenchyma* or proper texture of the lungs, and the capillary vessels so densely distributed upon it have no other coats or boundaries than those furnished by this parenchymatous texture. The practical point to be insisted on, with a view to the correct understanding of the pathology and diseases of the lung, is that involving the relation of the walls of the air-cells to the extremities of the air-tube on the one hand, and to the blood-vessels on the other.

The air-tubes and blood-vessels before entering into the interior of the lobules, run in the spaces between them, and here, cushioned as it were upon an areolar texture, they have severally their own distinctive elements and structures; but within the lobules, after sundry subdivisions, they all terminate in, and their textures become continuous with, the walls of the air-cells,—that is to say, with the parenchymatous texture; and here it is impossible, even with the microscope, to discriminate between the elements continuous with, or prolonged from, the coats of the blood-vessels and those continuous with, or prolonged from, the air-tubes, —that is to say, in other words, the outer surface of the thin transparent wall of every air-cell is in close relation with the interior of the blood-vessels, and its inner surface is as closely related to the air-tubes.

The parenchyma of the lung is usually described by anatomical writers as a mucous texture,—that is, a secreting texture, but it has none of the anatomical characters of a mucous texture, its perfect transparency and elasticity resemble much more the characters of a

* The increasing importance of the elements of the walls of blood-vessels, as the vessels diminish in size, is indicated by the fact, which may be demonstrated in the vessels of a transparent texture, that the thickness of the wall is, as a general rule, *inversely proportional* to the diameter of the column of blood it conveys. In a large vessel, 1-100th of an inch, the thickness of the coat visible on each side as viewed through the microscope (70),) is not more than one third or one fourth the diameter of the column of blood; whereas in a small vessel 1-500th or 1-1000th of an inch, the reverse proportions are frequently seen; the thickness of the wall of the vessel being three or four times greater than the diameter of the blood-stream. Hence there is no difficulty in clearly seeing the stages of nutrition hereafter pointed out.

fibrous or serous texture; moreover, it is well-known that its capillaries have a special function, and no analogy whatever exists between them and the capillaries of a secreting texture. In the adult lung the parenchyma is *coherent cellular;* the areolar texture interposed betwen the lobules is *fibrous* and *fibro-cellular;* the pleura which covers the whole lung, and lines the interior of the cavity of the chest, is both *cellular* and *fibrous*,—cellular on its smooth free surface, and fibrous beneath. The mucous texture of the interior of the air-tube is *fibro-corpuscular*,—that is, composed of fibres intermingled with incoherent cells, and the blood is a *corpuscular fluid*, flowing in streams over the walls of the coherent cellular parenchyma. But in the embryo all pulmonary textures are composed of soft, and but slightly cohering cells; in the fœtus they are partly corpuscular, and partly coherent-cellular; and during infancy and youth the walls of all the nutrient vessels, even of those which have become fibrous, are largely charged with incoherent corpuscles or cells. Hence then, the morphology of the textures of the lung is *corpuscular*, *cellular*, and *fibrous;* and there is nothing, except in the larger branches of the air-tube, of a cartilaginous or osseous texture.

VI. Physiological Analysis of the Corpuscular, Cellular, and Fibrous Textures.

Keeping in view the distinctions insisted on between the *corpuscular* and the *cellular* textures, it is evident that the corpuscular are the secreting textures, and the cellular non-secreting ones,—that is to say, the cells or corpuscles of the secreting textures, with their thin walls and elaborated contents, are temporary and evanescent elements; while the cells of the coherent-cellular textures, with their strong elastic and transparent walls, are comparatively durable and permanent; and as the rapidity of the changes and displacements which the elements of a structure undergo, is in a direct ratio with their importance in the functions of nutrition, secretion, and life, so therefore the cells or corpuscles of the corpuscular textures are more active or energetic than the cells of the cellular.

Again contrasting the corpuscular with the fibrous textures, the latter perform the comparatively mechanical offices of separating, investing, and limiting in bulk, the different groups of the various corpuscular and cellular textures, engaged in the more active functions of life, transmitting the larger columns of blood to and from them. These functional distinctions are indicated by the anatomical fibrous element, and by the species of vascularity observable in the texture. The corpuscular or secreting textures are everywhere traversed by multitudes of nutrient vessels, specially disposed in different organs; whereas the fibrous non-secreting ones, although in some instances extremely vascular, in consequence of having to transmit a multitude of small vessels, have yet comparatively few nutrient capillaries, and these variable and irregular in their disposition. The dura mater and pia mater are both fibrous membranes, surrounding, supporting, and protecting in bulk, the whole brain or central organ of the nervous system. The dura mater, as its name I suppose implies, is an exceedingly strong and coherent texture, transmitting immense columns or streams of blood to and from the brain, yet is itself scantily supplied with nutrient capillaries. But the arterial currents traversing the dura mater, and those still larger ones arising from other quarters, before they can be admitted into the soft corpuscular texture of the brain, must be divided and subdivided many times into the smallest possible streams, and the force of the heart's action subdued by sinuous turns and windings. For these ministerial purposes the much more fine and delicate fibrous texture of the pia mater is interposed, which not only affords space and area for the subdivisions of the blood-current, thereby becoming extremely vascular, but slipping down between all the lobular subdivisions of the organ, (here termed convolutions,) it enters into the recesses, supporting and limiting and conveying vessels, through which the blood reaches and returns from all parts of the soft and tender parenchyma of the great organ of life and being. Lastly, the cellular parenchyma of the lung is not tender, opaque, and brittle, like the corpuscular parenchyma of the liver, but is on the contrary exceedingly coherent, elastic, and transparent, and these anatomical characters indicating, as before observed, that the parenchyma of the lung is not a place of active nutrition or cell-elaboration,—not a secreting texture; and although eminently vascular, more so, perhaps, than any other texture of the body, still the vascularity is analogous to that of the pia mater, a ministerial and not a nutritive vascularity, the analogies of the texture being altogether with the fibrous non-secreting, and not with the corpuscular and secreting textures. This corresponds with facts; the only outlet and inlet to the lungs is by the windpipe; and if the air-cells, which have been computed to number 1.744.000.000 in each lung, or if an expanse of membrane equal in area to 1500 square feet, were a secreting membrane in the ordinary and proper acceptation of the term, persons would be always swallowing, or spitting, or coughing, which we know in health is not the case. The fine transpararent cellular texture of the pulmonary parenchyma allows the finer and vapourous elements of the blood to transude its walls, but it does not, I conceive, in the proper sense of the word, give rise to a secretion.

(To be continued.)

OBSERVATIONS ON SECRET POISONS.

By H. S. Belcombe, M.D., Senior Physician to the County Hospital, and Physician to the Retreat, York.

Under the term 'Secret Poisons,' are to be understood all poisons which can be administered imperceptibly, and which gradually shorten life like a lingering disease. They appear to have been known from very ancient times, and accounts of their use have been handed down to us with much apparent authenticity from both Greek and Roman history. Modern times have also the credit of far exceeding in criminality and horror the ancient poisoners.

Theophrastus speaks of a poison which could be so managed as to have effect in two or three months, or at the end of one or two years, and remarks that the death the more lingering it was, became the more miserable. This poison, which was said to be prepared from aconite, was very much used at Rome about 200 years before the Christian era. As several persons of distinction died the same year at that period, and of the like distemper, upon an inquiry being made into the causes, a maid servant gave evidence against some ladies of the first families, who she said prepared and distributed poison, and above 150 were convicted and punished. As so many had learnt this destructive art, it could not be suppressed, and we find sufficient proofs in Roman history of a belief that it was continually preserved. Sejanus caused such a poison to be administered by an eunuch to Drusus, who gradually declined afterwards, as by a consumptive disorder, and at length died. Julia Agrippina being desirous of getting rid of Claudius, but not daring to dispatch him suddenly, and yet wishing not to leave him time to regulate the succession to the throne, made choice of a poison which should deprive him of his reason, and gradually consume him. This she caused to be prepared by the too celebrated Locusta, an expert poisoner, who had been condemned to death for her infamous actions, but saved to be employed as a state engine. The poison was given to the Emperor in a dish of *mushrooms*; but as on account of his irregular manner of living, it did not produce the desired effect, it was assisted by some of a stronger nature. She was also employed by Nero to despatch Britannicus, and when the first poison failed was compelled by blows and threats to prepare one more powerful, in the Emperor's presence; for this she was pardoned, liberally rewarded, and pupils allotted her, that the art might not be lost.

All these poisons were presumed to be prepared from plants, particularly aconite, hemlock, and poppy, or extracted from *animal substances*. With the stronger and now common mineral poisons the ancients do not appear to have been acquainted; their arsenic seems to have been what is called orpiment, and not that mineral preparation which in later times was in Italy and France brought to such tremendous perfection. Thus Horace, when mentioning the poisonous drugs used by Canidia, particularly dwells upon wild fig trees, funeral cypresses, eggs besmeared with the blood of a loathsome toad, and the herbs brought from Iolchos and Iberia, "Venenorum ferax."

No one has perhaps ever rendered a name more infamous than Toffana, a female who resided at Palermo, about the commencement of the eighteenth century, but who afterwards went to Naples. In Labat's travels through Italy much information is given illustrative of the history of Toffana. She distributed her poison in small glass phials, with this inscription, "Manna of St. Nicholas, of Barri," and ornamented with the image of the saint. A miraculous oil said to drop from the tomb of this saint, is shewn at Bari, and was much lauded and sought after on account of its reputed medical virtues. It was the best name she could give it, as its sanctity prevented its being examined too closely. She suffered at length the punishment due to her crimes; but Keysler says, when he was at Naples, many years after her death, the poison was still secretly prepared and much employed.

The most authentic description of the Aqua Toffana ascribes its properties to arsenic. The dose was said to be from four to six drops. It was colourless, transparent, tasteless, just like water.

Hahnemann gives a very lucid detail of the symptoms: "They are," says he, "a gradual sinking of the powers of life without any violent symptoms—a nameless feeling of illness—failure of the strength—slight feverishness—want of sleep—an aversion to food and drink, and all other enjoyments of life—lividity of the countenance—dropsy closes the scene, along with black miliary eruptions, and convulsions."

It was observed at Rome, under the government of Pope Alexander VII., that many young married women were left widows, and many husbands died when they became disagreeable to their wives. The vigilance of government being excited, suspicion fell upon a society of young married females, whose president appeared to be an old woman, who pretended to foretell future events, and who had often predicted very exactly many deaths. The whole society was by a stratagem arrested, and being put to the torture confessed their crimes. Le Bret, who has furnished a succint account of these things, says that the old woman, Spara, was a Sicilian, and acquired her knowledge from Toffana, at Palermo.

But the art of poisoning never excited more attention than it did in France about the year 1670. The Marchioness of Brinvilliers, a beautiful but infamous woman, having formed a licentious attachment with a young officer named Godea de St. Croix, by the influence of her father he was arrested and thrown into the Bastile. He there got acquainted with an Italian named Exili, who understood the art of poisoning, and from whom he learnt it. In this he afterwards

instructed the Marchioness, who was sunk by dissipation into a low condition, in order that she might employ it in bettering their circumstances. The whole of this terrible and curious history may be read in the Siécle of Louis XIV., (Voltaire.) Suffice it here to say, that St. Croix, when preparing his poison, was accustomed to wear a glass mask, but this happening to fall off, he was suffocated, and found dead in his laboratory. (On this I shall have to make a few remarks presently.) To such an extent was this system of poisoning carried, that a particular court, called the "Chambre de poison," or "Chambre ardente," was at length established; but it is a considerable question whether it was not made use of in a time of public panic or delusion for a political inquisition. It seems certain that only two women were discovered to be the principal perpetrators; and as these furnished a list of several of the first rank who had recourse to their services and sought the use of their remedies, there may be shrewd reason to suspect they furnished other modes of *secret poisoning*.

That mankind were, in an early stage of their existence, not only acquainted with the deadly effects of certain natural substances, when applied in minute quantities, and that they availed themselves of such knowledge for the accomplishment of the worst purposes, the records of history shew; but with respect to the secret modes in which such substances have been supposed capable of acting, the most extravagant credulity has been displayed. Such tales as have been reported of Parysatis poisoning Statira, by dividing a bird with a knife poisoned on one side;—of Livia poisoning the figs which her husband chose to gather himself;—of the kings and potentates who have been destroyed by poisoned boots, gloves, the fumes of a taper or a wassail bowl contaminated with matter extracted from a living toad, may well be consigned to the imagination of a wonder-seeking age, and, perhaps, were invented and related for some purpose of inducing fear or exciting suspicion. They certainly did continue for a long period to alarm mankind, and to perplex and baffle judicial investigation. Indeed, considering how frequently poisons were administered under the insidious forms of charms and incantations, and the difficulty of delivering the mind from superstition, we may, perhaps, less wonder at the strong expressions of the writers of those periods.

It appears to me difficult to believe that in a period of the history of Rome, renowned for the austerity of its virtue, and simplicity of its manners, a set of females should have applied themselves to the knowledge of poisons, and assembled to compose them. Livy himself does not appear to have believed it. He says there was a mortality caused by the temperature of the air, or by human malice, and the story seems as much a fable as the embassy to Æsculapius, and the voluntary embarking of the serpent.

All poets and romancers have taken secret poisons, charms, and incantations, under their most especial protection, and excellent use have they made of their materials. From Shakespeare's "juice of cursed Hebenon," down to Sir Walter Scott's admirable management of them, they have been employed for their various uses. In "Kenilworth" the Earl of Sussex is supposed to have been played upon, and the description given of him while labouring under the malady, accords exactly with the early symptoms I have quoted from Hahnemann; but a more powerful use is made in the novel of the "Fair Maid of Perth," where the death of Dr. Dwining is thus described.

"You see this trifling instrument, said the criminal, shewing a silver pen; by means of this I can escape the power even of the Black Douglas. Give him no ink nor paper, said the Baron hastily, he will draw a spell. Not so, please your Valiancy, said Dwining, with his usual chuckle, as he unscrewed the top of the pen, within which was a piece of sponge, no bigger than a pea. Now, mark this! said the prisoner, and drew it between his lips. The effect was instantaneous, he lay a dead corpse before them, the sneer still on his countenance."

Poisons long continued to be secret because there were no means known of detecting them. In the casket of St. Croix, were found sublimate, opium, regulus of antimony, vitriol, and a large quantity of poison ready prepared, the principal ingredients of which the physicians were not able to distinguish. Many have affirmed that sugar of lead was the principal ingredient, but the consequences of the poison do not seem to have indicated the use of that metal. From information obtained by the Abbe Gagliani, it was at one time generally believed to be opium and cantharides, and many presume that there have been different kinds of these Stygian waters; but Dr. Hahnemann's conjecture of their being arsenical neutral salts, seems most probable.

It has been said that St. Croix wore a glass mask during his manipulations. There is no doubt that the fumes of arsenic incautiously breathed may be of very dangerous tendency. Dr. Christison quotes many cases in his work on poisons. He quotes also an anecdote from Balthazar Timæus,—viz., that the famous Paracelsus, being one day put out of temper by an acquaintance, made him hold his nose over an alembic in which arsenic was subliming, and that the subject of this severe joke nearly lost his life in consequence. It would appear, also, that the poison acts with great rapidity when its fumes are respired. Poisoning through the lining membrane of the nose has also occurred. One case is quoted by Dr. Christison, where an arsenical lotion had been used by mistake. The individual was attacked with profuse discharge from the nostrils, and then with stupor, approaching to coma. Weakness of sight and of memory continued

after sensibility had returned, and he died two years afterwards, death having been preceded for some time by convulsions.

Beckman concludes one part of his history of secret poisons with these words:—"The more it is to be wished that preventives and antidotes were found out, and that the symptoms were ascertained; but this is hardly possible, as long as it is not known of what the poison properly consists." Much of what was thus wanted has in later times been supplied by the intelligence and industry of various persons, and perhaps splendid as are the discoveries of modern chemistry, nothing has aided more than the labours of Orfila upon this particular subject. It is only since toxicology began to assume an accurate and systematic form, that the physician can be truly said to be in possession of antidotes. It is to very recent times that he owes the discovery of the virtues of albumen as an antidote for corrosive sublimate and verdigris;—of bark for tartar emetic,—of the alkaline sulphates for sugar of lead,—of the alkaline and earthy chlorides for hepar sulphuris, (sulphuret of potass,)—of ammonia and chlorine for prussic acid;—also for ascertaining the superiority of magnesia and chalk over other antidotes for the mineral acids and oxalic acid; and the superiority of vinegar or oil for the mineral alkalis.

To those who have watched the rapid strides with which physiology has advanced within the last twenty years, it will at once be apparent, how powerful an instrument of research that science has found in the effects of poisons on the animal body. The observation of these effects has led in a peculiar manner to our present enlarged knowledge of the laws of absorption; it has greatly aided the experimentalist in ascertaining the respective part performed by the veins and the lymphatics in the discharge of this function; it has contributed to the discovery of the permeability of the living tissues, and the influence which this property has in producing many of the phenomena of absorption; it has helped to unfold the power exercised by absorption in the development of many vital actions, formerly ascribed to nervous operations. In short, it has been one of the principal guides by which Brodie, in this country, and Majendie, in France, have been directed in the progress of their brilliant discoveries; so that by a curious transition, what formerly was dreaded as the exterminator of life, and made available for acts of tyranny and deeds of infamous oppression, has now, by the guidance of a sound philosophy and active industry, become the means of investigating the laws of life, and of improving the art of preventing and curing disease.

If, however, they were employed in former days, as instruments of terror and distress, I grieve to say, that in these times, they can be, and have been, made available for the basest purposes of selfishness and dishonesty. I believe there is little doubt that race-horses have been drugged previously to running; morphine is said to be the article used; horses like it, and a small quantity is sufficient for the required purpose. A friend of mine told me, that having to ride a very unruly horse in a procession, a small quantity of opium was given it, and he went through his work with as much lazy indifference as if he had drawn a state carriage all the days of his life. It is from this source, perhaps, that whisperers and other horse-magi derive their power of taming.

I have mentioned that some of the ancient poisons were said to be extracted from animal matters, and it is certain that a poison can be generated from such substances.

I have thus run over cursorily the subject of secret poisons, with some reasons for my disbelief of their frequent use, arising from the superstition, the ignorance, and the want of scientific research belonging to those days. I will conclude with two observations, which may be considered as aphoristic deductions. At a time when a preparation of gold was strongly extolled for its various powers, particularly as a poison, Dr. Fordyce said he believed gold to be only a cordial for the pocket, but a poison for the mind. An ignorant physician, and even a learned but inattentive one, is often a poisoner; and a good cook is a certain slow poisoner, if temperance does not regulate our obedience to her mandates. Mr. Addison concludes one of his papers with the following observations—"That secret poisons were much in request, and sought to be employed in former days, I think there seems to be no doubt, and even excellent and well-judging writers appear to have believed in them. Whether in this time of greater knowledge they are not likely to be so employed, or whether the farther advance of science will lead to such a discovery of them as to baffle their use, I will not determinine, but one poison has been handed down from an early age of civil society, has been used through most conditions of life, and yet continues its operations; its only antidote is a more genuine love, and practical action of examining before believing,—I mean the poision of secret defamation."

CASES OF CYNANCHE STRIDULA, TREATED WITH THE SULPHATE OF COPPER.

By John Bryan, Esq., Surgeon to the Northampton Victoria Dispensary.

Case I.

John Penn's child, aged 18 months, living at Ecton, five miles from Northampton. October 26th, 1844, I was called in to this child, who was exceedingly robust, at ten in the evening, and found her with stridulous breathing and severe exacerbations, with spasm, threatening suffocation, and having all the characters of confirmed croup. She had been ill with hoarseness and

fever for three or four days previously. The following remedies were used:—

Hirudines iv. gutturi statim. R. Vin. Ipecac., dr. vj.; Oxym. Scillæ, dr. ij. M. Capt. dim. statim.

This remedy having produced vomiting, in about two hours the following medicine was commenced:—

R. Cupri Sulph., gr. xij.; Syr. Simpl., dr v.; Aq. Destillat., dr. vij. M. Capt. coch. min. omni vel bihor. To have a warm bath.

October 27th. There had been retching of thick mucus all the night without severe vomiting, and although the child was a good deal collapsed, the breathing was more free, but still there was some croaking sound. The bowels were freely opened. Warm bath repeated.

R. Cupri Sulph., gr. iv.; Syr. Tolut., Aquæ, utrq, oz. ss. M. Capt. coch. min. quartis horis.

28th. Breathing better; croaking sound nearly left.

Rept. Mist. Cupr. Sulph. R. Mist. Oleos., dr. v.; Syr. Tolut. dr. iij.; Vin. Ipecac., dr. ss. M. Capt. coch. min. iij., quartis horis.; at intervals with the Cupri Sulph. mixture, which was now given only twice or three times in the twenty-four hours, or whenever the phlegm seemed at all accumulating.

30th. Improving. Continue medicine.

31st. Improving.

November 3rd. Left off the Cupri Sulphas, which had only been given once or twice the last two or three days. From this time the child rapidly improved.

Remarks. The case at first appearance seemed hopeless, the croup being fully confirmed, the breathing of a suffocating character, and the child, independently of being robust, disinclined to take anything in any quantity, therefore the small quantity required of the medicine answered perfectly well.

Case II.

August 28, 1845. Mr. Wichens' little girl, aged 5, of Black Lion Hill, was taken ill on this day with catarrh or influenza, with slight hoarseness. The following remedies were prescribed:—

R. Pulv. Jacobi, gr. iij.; Hydr. Chlorid., gr. ij.; hora somni sumend. R. Liq. Ammon. Acet., Mist. Camph., Aquæ, sing. dr. x.; Spt. Æther. Nitr. dr. j.; Syr. Tolut., dr. iij.; Vin. Ipecac., Oxymel. Scillæ, utrq. dr. j.; Potas. Nitr., scr. j. M. Capt. cochl. ampl. iss., quartis horis.

August 29th. The breathing at the chest appearing tightened a blister was applied to that part.

Rept. Mistura. R. Pulv. Jacobi, gr. iss.; Calom. gr. $\frac{1}{3}$; Pulv. Ipecac., gr. $\frac{1}{3}$. Fiat pulvis cum sing. dos. mist. sumendus.

30th. The symptoms took on the form of croup, with stridulous breathing, and the croaking noise so characteristic of that complaint.

The powders were continued, and at the same time—R. Cupri Sulph., gr. xij.; Syr. Simpl., dr. v.; Aquæ Destillat., dr. vij. M. Capt. coch. min. ij., secunda quaque hora.

Gentle retching of mucus and phlegm was immediately induced after each dose with great relief to the breathing. The Tinct. Iodin. Comp. was applied freely to the throat over the situation of the larynx and trachea morning and evening.

Sept. 1st. Symptoms mitigated. Rept. Mist. Cupri Sulph. et Pulv.; et appl. Tinct. Iodini mane et vespere.

2nd. Improving. Rept. Med. et appl. Tinct. Iodini.

3rd. Improving. Repeat the medicine.

From this time the croaking sound in the breathing ceased, the Cupri Sulphas, therefore, which appeared to depress the powers considerably, was left off, and the mixture first prescribed given twice or thrice daily, the child all the time improving.

In this case, which was seen sooner than the first, the symptoms primarily indicated inflammation of the superior part of the chest, and were succeeded by inflammation of the larynx, which was speedily arrested by means of the Cupri Sulphas, with the application of Tinct. Iodini Comp. The child was of very weakly habit, and bleeding in any form appeared contraindicated.

Case III.

Mr. Wilson's child, aged 11 months, Cow Lane, Northampton. I was sent for late at night to this child, who had been ill for a few days with what the mother thought to be a common sore throat, with hoarseness, and she had noticed the croaking breathing the preceding night, so that the symptoms of croup, when I first saw him, were quite confirmed. He was very plethoric, but considerably depressed, and at first sight I thought the case hopeless, the spasms in breathing being so severe as to threaten suffocation.

Empl. Lyttæ sterno admov., et Tinct. Iodini Co. gutturi. R. Pulv. Jacobi, gr. iss.; Calomel, gr. j.; Pulv. Ipecac., gr. ss. Fiat pulv. tertia quaqua hora sumend. To have a warm bath. R. Cupri Sulph., gr. iv.; Syr. Tolut., Aquæ Destillat., sing., oz. ss. M. Capt. coch. min. tertiis horis.

Nov. 11th. 10 a.m. The symptoms were mitigated; retching of mucus and phlegm had quickly taken place after each dose of Cupri Sulphas, which relieved the breathing very much; and although there was considerable uneasiness from the application of the tincture of iodine and the blister, the child slept at intervals.

Cont. Mist. et Pulv. R. Pulv. Scam. Co., gr. iv.; Calomel, gr. j. statim; the bowels not having been relieved. This acted well in two hours.

Nov. 12th. Improving. Cont. Mist. et Pulv. The application of the tincture of iodine having taken considerable effect on the throat in producing vesication, was not repeated.

14th. Omitt. Cupri Sulph., et Pulv. cum Hydrarg. Chlorid. R. Pulv. Ipecac., gr. ss.; Pulv. Jacobi, gr. iss.; ter die sumend. R. Mist. Oleos., dr. ix.; Syr. Tolut, dr. ij.; Vin. Ipecac., Tinct. Camph. Co. utrq, dr. j. M. Capt. coch. med. ter die.

The symptoms now continued improving, with the exception of rather a hard cough, which ceased in two or three days.

Remarks.—Two of these cases were such, as I had, previous to trying the Cupri Sulphas, found intractable under the usual remedies, as leeches and blisters, with

ipecacuanha and squill emetics, and calomel and James's powder; and I have every reason to think that the Cupri Sulphas was the main remedy in effecting a speedy cure; but it seems to me to require constant watching, (as of course does also the complaint itself,) for there appears to be great collapse and paleness induced, with retching and usually purging of green stools. I first received the hint respecting this remedy from "Braithwaite's Retrospect," vol. 8, Art. 28, by Dr. Schwabe, and found the effects exactly the same as they are described in this article. I am disposed, however, also to attach some importance to the application of the tincture of iodine at the same time with the other remedies.

CASE OF POISONING BY EXTRACT OF BELLADONNA.

By John M. Banner, Esq., F.R.C.S., Senior Surgeon to the Northern Hospital, Liverpool.

T. N., aged nine, was affected, on the 27th of October, 1846, with mild scarlatina. The fever ran its course in about eight days. On the third day after the disappearance of the eruption, jaundice presented itself; the skin was highly tinged, the stools white, and the urine highly impregnated with bile. Although the eruption disappeared, it was not until the 27th of December that the process of desquamation was completed.

At the latter end of December (the 20th,) I was requested to see Master N., in consequence of the obstinacy of the jaundice, and considered it necessary to prescribe an ounce of extract of dandelion, to which was to be added two wine-glassfuls of water. Of this mixture he was ordered to take three tea-spoonfuls three times a day, and did so regularly until the 4th of January, when the pot which contained the extract was again sent to the druggist to be re-filled, and at night the water added as usual. For some reason unassigned, the night dose was not administered.

At eleven, a.m., of the 5th, the first dose of the mixture or fluid extract was given by the mother, at which time the boy was in good spirits, and in every respect much better; the secretion of bile was passing into the bowels; his appetite was improved, and we had good reason to consider him fast approaching to recovery. The mother left the patient in the charge of her maid for a few hours, having occasion to absent herself for that length of time. She had not been gone more than half an hour, when the servant states that she observed a strange and unnatural appearance about the boy, but did not feel any alarm, nor did she think it necessary to state the circumstance to the family until about half an hour later, (twelve o'clock,) when the boy began to talk very incoherently, and was extremely restless; the delirium became very high, but quickly passed off, when he became quiet, though constantly affected with twitchings in the arms. Not knowing what to do, and ascribing the state to exhaustion for the want of food, she administered a large quantity of hot tea, which caused *great sickness*.

When I saw the case at three o'clock, I was told that the boy had vomited twice after taking the tea, and had thrown from the stomach a large quantity, which had not been preserved. The patient appeared in a comatose state; the breathing was slow; the eyes fixed; the pupils dilated to the fullest extent, and insensible to the admission of light; the hands and feet were cold and moist; the pulse was remarkably quick and weak, and slightly intermittent. If roused the patient tried to seize hold of the person touching him, and would shout, and occasionally laugh loudly, and would throw out the arms as if striking at an object; he could not articulate, though he often muttered as if attempting to express something; there was twitching of the flexor muscles of the arms, particularly of the left; he frequently seized hold of the bed-clothes, and attempted to draw them up, as if to cover his head. I ordered wine and hot water to be given freely; warmth to be applied to the surface, and cold-spirit wash to the head, and a large enema of salt and gruel was administered. After this injection the patient became very restless, constantly trying to get up. Thinking it probable that he wanted to pass stool, we carried him to the chair, when he passed large evacuations, which would prove some degree of consciousness. There was great disinclination to swallow fluid; it required more than ordinary force to effect this object. After a considerable excitement, for a minute or two he would fall into a quiet state, scarcely moving; he would suddenly begin to throw about his arms, and strike them forcibly from him, and then seize the bed-clothes, and endeavour to draw them over his face and head. The arms occasionally twitched convulsively. I remained with the patient for a considerable time; the first impression was that he had taken some narcotic poison, contained either in an embrocation or cough mixture. We carefully examined the room, but could not find anything confirmatory of this.

Having explained to the family the great danger the child appeared to be in, and the difficulty I felt in assigning a cause for the sudden change in the case, Dr. Duncan was requested to meet me in consultation. We met at five o'clock, five hours after the first attack, at which time the symptoms continued as before related, with the exception that the surface generally was warmer. The wine and water had been *forced* into the mouth, and he had swallowed a considerable quantity, on various occasions

Dr. Duncan was equally at a loss with myself as to the cause of the symptoms; at first he was inclined to attribute them to the jaundice, or some intestinal irritation, but from the fact that the child had been so much better, and the bile beginning to pass into the bowel, at once did away with the first supposition. On questioning the mother (who had by this time returned home,) we for the first time learnt that fresh medicine had been procured on the previous night, and she did not at the time of mixing it think it quite the same as before On examining the extract we immediately considered it a wrong medicine, and pronounced it either belladonna or henbane. To make ourselves fully satisfied we visited the druggist who had furnished it, as well as the former pots of extract. He unhesitatingly acknowledged that he had sent the extract of belladonna, and for the moment did not appear aware of

the mistake. It appeared that he had to send out some of the extract of belladonna on the night in question, and the impression on his mind was, that the same extract was wanted for T. N., and thus the mistake arose. I mention this circumstance to prove that there is no mistake as to the extract of belladonna being given, nor of the quantity taken.

The mode of treatment was persevered in; the lotion to the head, the wine and water drink, and a powder containing rhubarb and calomel given, which acted freely. The evacuation was dark-coloured, and from the peculiar odour, we considered it to contain a considerable quantity of belladonna. The delirium continued during the night, little varying from the symptoms enumerated; the pulse became more intermitting and fuller, so that it was thought proper to discontinue the stimulants.

At four, a.m., of the 6th, sleep for the first time overcame the patient; he slept lightly for two hours, after which the delirium was less violent, the pulse more tranquil, though very intermittent. He again slept lightly until near nine, a.m., and appeared more conscious afterwards; the pupils were still fully dilated, and he did not appear to see objects clearly, for on taking his hand, he felt with the other hand at what touched him, and laughed very much; he had less disinclination to take fluid, and partook of a small quantity of gruel. During the whole delirium he showed, from his peculiar restlessness, that he either wished to pass water or stool, neither of which passed involuntarily. There was not the least appearance of eruption.

From this time the symptoms gradually disappeared, the pulse became more regular, the pupils gradually became less dilated, though very irregular in their action; it was not until the expiration of five days that they acted more regularly; at that time the right pupil remained more dilated than the left. He complained for several days of pain in the head and difficulty of vision; he could not see to read with ease for some time, indeed I may say, that it was ten days before he got from under the influence of the poison.

From the calculation made, we consider that at least thirty grains of the extract of belladonna was given. The belladonna did not appear to have any effect on the jaundice, beyond the fact of its deranging the system for some days.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF WILLIAM SANDS COX, ESQ.

By Peter Hinckes Bird, one of the Resident Medical Officers.

(*Continued from page* 69.)

Case XXII.

SCROFULOUS CARIES OF THE SPINE.

James Riley, aged 25, labourer, admitted March 25th, 1846, into the Queen's Hospital, Birmingham, under the care of Mr. Sands Cox. He states that rather more than two years ago he first felt a pain in his right side, which afterwards flew to the back; it was treated as a rheumatic pain; he gradually got worse, and eighteen months ago he was obliged to give up his occupation, as he got very weak, and was soon tired; the use of his legs was gradually impaired, and his back became weak, and he perceived that the backbone became prominent. He states that his legs have at times been drawn up at nights; his urine dribbled away, and he had not perfect control over defecation; has never had abscesses in the back nor in any other part of the body; had swelling of the submaxillary glands a short time since. He states that he contracted syphilis two years ago, for the cure of which he took mercury; has been under medical treatment for eighteen months; enjoyed good health previously,—that is to say, about two years ago.

He complains of dull aching pain in the dorsal region, and of slight tightness across the chest; he cannot stand or walk upright, but is much bent forward; his legs feel numbed and cold, and the sensibility is diminished; can retain his water perfectly; urine rather turbid, of natural quantity; pulse strong, 86; appetite good; has a slight cough; the muscles of his limbs are soft, flabby, and atrophied; has no pain in the arms. On examination of the back there was found projection of the spinous processes of the middle dorsal vertebræ; there is no abscess there, nor on any part of the body.

Ordered to be cupped on each side of the spine, and to remain in bed in the recumbent posture.

April 3rd. About the same; legs still numbed; appetite indifferent; bowels rather confined.

R. Quinœ Disulph., gr. xij.; Acid. Sulph. dil., dr. j.; Aquæ, Oss. M. Sumat oz. iss., ter die. Pil. Rhei Comp. ij. hora somni sumend.

6th. Better; bowels open; appetite improved.

20th. Much better; can walk in a more erect posture; appetite improved; cough quite gone; bowels regular; his urine presented this morning an iridescent pellicle; this he states he has noticed frequently before. On examination of a portion under the microscope, the beautiful prisms of the neutral phosphate, mixed with imperfectly-formed crystals of the neutral phosphate, and a few penniform crystals, with epithelium.

Contin. mist. tonica.

23rd. Bowels rather confined. To take Pil. Rhei Comp. ij., statim.

26th. Complains of pain in the back. To have an issue applied on each side of the diseased vertebræ.

29th. The sloughs have separated. To have the issue kept open by the daily insertion of peas.

May 6th. The issues have discharged freely; feels better; legs not so numbed; the pain has disappeared from the dorsal region, and occupies the lower part of the lumbar, extending from hip to hip; can walk much better.

14th. Can walk upright; pain in the hips not so severe; the urine, which was pale, and of a light amber colour, when examined under the microscope, presented

the simple stellæ of the neutral salt;* they appear adhering to a fine transparent hair.

22nd. His legs do not feel so numbed, the left is more so than the right; the pain in the hips is worse towards night; general health improved; issues discharge freely.

27th. Complains of dull aching pain in the hips, which is considerably increased towards night. Ordered to have the moxa applied in three places on each side at the upper part of the sacrum.

June 5th. The moxa afforded considerable relief to the pain. In other respects about the same.

27th. Pain in the hips better; more motion in the legs, which feel stronger; general health improved. Discharged relieved.

In this disease, of which the true cause is a morbid state of the spine, the actual curvature must be preceded by a disease of the parts, unaccompanied with any visible deformity, and cannot take place until the caries has made considerable progress, therefore the diagnosis in the early stage must be very obscure. The absence of abscesses may assist the diagnosis. More frequently the disease begins in the bones; when it does so, abscess commences early. According to Sir Benjamin Brodie, in many instances caries of the spine has its origin in an ulceration of the intervertebral cartilages, afterwards affecting the bodies of the contiguous vertebræ. The pain is most manifest when it affects the intervertebral substance. In this case it is most probable that the disease began in the intervertebral substance, as no suppuration took place, at least externally, and the pain was a constant symptom. Curvature in the spine, in the direction forwards, may arise from other causes, as a weak condition of the muscles, or a rickety affection of the bones; but in these cases the curvature is always gradual, and never angular, a circumstance by which it is distinguishable from the curvature produced by caries.

One common effect of scrofulous caries of the spine is the production of abscesses around the diseased bone; but it frequently happens that caries goes on to an immense extent, and even so as to demolish the bodies of certain vertebræ, without any abscess being produced. The venereal disease is said to be sometimes the cause of caries; but in this case it appears that the symptoms of caries were prior to those of syphilis. This disease is extremely frequent in children, (there are now two children in the Hospital affected with it,) but adults are by no means free from it.

In most cases of scrofulous caries of the spine, paralysis of the lower extremities, and even a more extensive paralysis, will come on sooner or later, and is more commonly met with in the more severe cases than in those less advanced; yet this is by no means universally the case, and it is really surprising to what an extent caries of the vertebræ may reach without the supervention of paralysis. Professor Cruveilhier† gives the particulars of a case of scrofulous disease of the vertebræ, in which no paraplegia existed, though no less than five of the bodies of the dorsal vertebræ had been totally annihilated, and the alteration in the shape of the vertebral column was such, that the upper half formed with the lower an extremely acute angle, which would have been still more acute, if it had not been prevented by the eleventh and fifth actually touching one another.

The appearance of the phosphates in the urine which is usually indicated by the iridescent pellicle, is of frequent occurrence in cases of diseased spine.

In the treatment of this case the two following indications were to be fulfilled—1st, to retain the spine in the most favourable position for anchylosis to take place; and, 2nd, to improve the state of the general health.

To fulfil the first indication, recumbency is necessary; for it will be obvious, that until anchylosis take place in a more correct position, there must always be a tendency towards a re-production of the deformity, should the patient attempt to walk or move about in the erect position, because then the weight of the head, chest, and upper extremities, would press upon the diseased portion of the spine, which would naturally give way as before, at the carious point.

To accomplish the second indication, the state of the digestive organs is to be strictly attended to, so that by a course of tonic medicines, assisted by mild purgatives, when required, the health may be so much improved, that a more healthy action of these parts may be re-established.

Anchylosis or bony union of the vertebræ is the only permanent cure when caries of these bones has taken place; but some believe that when there is caries of the vertebræ, anchylosis can only take place by the remaining portions of the bodies of the vertebræ being brought into absolute contact, under which circumstances the deformity must, of course, remain permanent, or, what is more probable, be increased. But the resources of nature are by no means so limited, for when caries of the spine occurs, the periosteum, the anterior common ligament, and the surrounding textures become thickened, so as to form a firm membrane or sac in front of the diseased bones, and thus prevent the pus which is formed being effused into the neighbouring parts; but should the sac be incomplete, or from perforation or other cause, allow the escape of the puriform matter, then lumbar, psoas, or other abscesses are formed, or the still worse consequences of effusion into the pleura or peritoneum follow, a circumstance which, however, rarely occurs.

If the progress of the caries cease, and the health improve, nature attempts, by the formation of new bone to repair the injury done, and to fill up the space produced by the greater or less absorption of the bodies of the vertebræ. If the remaining portions be allowed to continue in juxta position, union between them taking place, any improvement in the spinal deformity will be rendered impossible; but if the spine by suitable means be got straighter, and retained in that position, until a healthy osseous deposit take place in the diseased part, the resulting deformity will be much lessened, and sometimes rendered comparatively trifling, and the cure will be both complete and permanent.

* Urinary Deposits, by Dr. Golding Bird, p. 173.
† Anatomie Pathologique, Livraison 4ième.

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, FEBRUARY 24, 1847.

We have lately received another of that valuable series of reports—the Quarterly Returns of Health and Mortality, issued by the Registrar General. It will be remembered that the return for the quarter ending September 30th, 1846, shewed a great increase of the mortality during the preceding three months, much of which was attributable to an epidemic of diarrhœa, cholera, and dysentery. From the return for the last quarter ending December 31st, 1846, we learn that, notwithstanding the decline of this epidemic, there is still a great increase in the mortality over the corresponding quarter of the preceding year, and over the calculated average. The excess of deaths in the one hundred and fifteen districts, included in these returns, the population of which in 1841, was 6,579,693, amounts to 7311 above the calculated number, to 12,943 above the corresponding quarter of 1845, the actual number of deaths being 52,905. It is obvious, therefore, that other causes of fatal disease must have been added to, or taken the place of, those in operation, during the previous quarter.

The early severe cold, setting in considerably before Christmas, seems to have had much effect, as bronchial, catarrhal, and pulmonary affections, were frequent, severe and fatal, especially amongst persons affected with heart-disease. Rheumatism is another disease to which a portion of the increased mortality in some districts is attributed, and diarrhœa still continued to prevail, in some of the northern districts especially. Other diseases which contributed to the mortality in certain districts, are measles, scarlatina, and typhus. In London, the deaths from cold and want were nearly doubled; and we are informed that "the sad condition, and the habits of the poor Irish emigrants, have no doubt contributed to deteriorate the health of Liverpool, Glasgow, and Bristol—the ports through which they enter—as well as to raise the mortality of Manchester, and other inland towns." It would seem therefore, that the mortality of the quarter is mainly attributable to the effects of cold, combined probably with scarcity, and the remaining influence of the epidemic constitution of the preceding quarter.

"It is well known," says the return, "that the decaying matters of marshes give rise to agues, dysenteries, and fevers; and it is proved satisfactorily by the facts collected under the Registration Act, that the excessive mortality from diseases of the zymotic and other classes, observed in towns, is occasioned by animal or vegetable poisons, with which the atmosphere is charged, in different degrees of concentration, depending on accumulated filth, crowding in dwellings and workshops, the closeness of courts, imperfect supplies of water, and the want of efficient sewers. The high temperature of the summer of 1846, in which the mean thermometer ranged from 0°2 to 7°7, above the average, during ten weeks out of thirteen, accelerated the decomposition, and increased the virulence of these effluvial poisons, as well as of the diseases which they promote. Once grown epidemic, the diseases continued to rage during the rest of the year. Thus the mortality of 1846 may be accounted for. If it took place in obedience to any cyclical law, or to a general cause acting simultaneously in Asia and Europe, the great fact remains, that the deaths were nearly twice as numerous in ill-constructed towns, where the poison is concentrated, as in the country, where it is diluted and destroyed by the fresh air."

The return proceeds to shew that the precise degree of influence which the various agencies of want of water, sewerage, or ventilation—crowding of the population—neglect of children—the practices of quackery—want of skilful medical advice—intra-mural interment—noxious emanations, &c., exercise in causing the high mortality of towns, is not easily determined; and then refers to the known improvement in the health of the navy, in consequence of the adoption of the enlightened views of our great navigator, Captain Cook. In ten months after leaving England, Anson lost 626 men out of 961 in three ships, from scurvy, dysentery, and putrid fever. In the year 1780, the Channel Fleet sent 11.732 sick to the Haslar Hospital, 1457 of whom had scurvy, 240 dysentery, and 5539 fever. In the year 1772, Cook sailed round the world, and returned in the space of three years, with the loss of only four men by accidents, and *one* by disease. After the adoption of his principles by the Admiralty, the health of the navy was raised to a satisfactory standard, and in Captain Parry's three voyages to the Polar region, only seven men died out of 334.

Captain Cook, continues the report, "did not wait till it had been settled how much of the sickness at sea was caused respectively by bad ships, dirty water, rotten provisions, the want of ventilation, and of lemon-juice. He procured, amidst great difficulties, *all* that he believed was requisite to the health of the men. The experiment, though not an *experimentum crucis*, as applied to any one cause, was successful. It did not solve a physiological

problem, but it saved the men's lives. If the general measures for the health of towns announced are proceeded with, they will no doubt be as successful as the similar measures introduced into the navy, and crowned in Cook by the award of the Royal Society in the last century."

Review.

Practical Remarks on Near Sight, Aged Sight, and Impaired Vision; with Observations upon the Use of Glasses, and on Artificial Light. By William White Cooper, F.R.C.S., Senior Surgeon to the North London Ophthalmic Institution, &c. &c. London, 1846. Post 8vo. pp. 216.

There are few subjects of greater interest to the comfort and enjoyment of a very numerous portion of the community, than those which Mr. Cooper has here selected for remark. Near sight is an extremely prevalent, and there is some reason to fear, an increasingly prevalent affection; what is termed aged sight or presbyopia is, more or less, the common lot of all who pass the middle term of life; and impaired vision of various degrees, the penalty which the artisan, the close student, and the man of science, are called upon to suffer, from a heedless use, or rather misuse, of the organs of sight, to which the love of knowledge, ambition, and too frequently also necessity, impels them.

Upon these several states Mr. Cooper's work contains much interesting and useful information, and sound practical directions, on the means proper to be employed in the alleviation of the original or natural defect, the remedies to be used when the sight has become impaired from want of due care, and on the adoption of certain precautions in the use of this first blessing of intellectual man, by which the powers of the eye may commonly be preserved intact, or at least in a state of efficiency, until the gradual failure of the entire organism gives impressive warning that mortality is the lot of all.

Neither is it the least recommendation of Mr. Cooper's Essay, that it is written in plain and intelligible language, fitted for the comprehension of the many who are so deeply interested, and who, yet in unconscious ignorance, are pursuing a course which, unless the warning note reaches them in time, may bring on a state and induce mischief beyond the power of human means to alleviate or control. Myopia, for instance, is an affection which by proper adjustment of the optical means at our command, admits of much alleviation. The vision of the near-sighted, by the use of glasses, from being confined and indistinct, becomes clear and defined. But the very perfection of the relief at first experienced too often leads to the increase of the mischief; the first sharpness of the newly acquired power of distinct distant vision, in certain cases (more especially when it is the power of adaptation of the eye to varying distances which is at fault,) after a time wears off; the glasses do not suit so well as they did at first; others of increased power are perhaps had recourse to, and with the same effect, until the original defect is greatly aggravated. On these several points Mr. Cooper's work contains information which the community at large, and even many professional men, are much in want of. The cause is pointed out, the remedy indicated, and the necessary precautions to prevent farther mischief duly enforced.

The observations on the use of glasses are extremely judicious, and, with those on the effects of artificial light, ought to be carefully considered by all who are in the habit of studying or working during the hours of night, or from whatever cause are compelled to have recourse to the aid of spectacles. We select the following case of the effects of the destructive use of the eye to which modern habits compel very many of the working part of the community:—

"Harriet Porter, a delicate-looking female, aged 19, applied at the North London Ophthalmic Institution, February 17th, 1846. She was apprenticed to a milliner, and had been for some time in the habit of working with her needle for ten hours each day. During the London season it was no uncommon thing, she stated, for her to work twelve, and even fourteen hours, daily. Her eyes, she said, felt strained and ached, after sewing for a short time, and she experienced great difficulty in working, especially at night, in consequence of a mist which came over her sight, and rendered all objects indistinct. This mist had been gradually increasing, and of late she had seldom been free from it. She was subject to headache, and frequently experienced a weight over the brows, with aching of the eyes, muscæ volitantes after the slightest exertion, and occasional flashes of light. The movements of the pupils were slow, the irides dull, and in the left eye I detected two minute adhesions of the margin of the pupil to the anterior capsule of the lens.

"Rest to the eyes, an alterative course of mercury, in connection with tonics, and continued counter-irritation to the forehead and temples, produced a highly beneficial effect; and the patient was discharged at the expiration of four months, greatly improved in health, and with her vision nearly perfectly restored."

This case needs no comment. It is unhappily but too frequent, and the records of our Ophthalmic Institutions could supply not only many such, but many more in which the over-tasked organs have become, from continued misuse and neglect, structurally and irremediably impaired. In conclusion, we would recommend a perusal of Mr. Cooper's work to all who are suffering from the defects of vision of which it

treats; to the consumer of midnight oil; to the philanthropist, and especially to the medical practitioner, as conveying sound information on subjects of such every-day occurrence, as notwithstanding their importance, from their very frequency often escape the attention to which they are so prominently entitled.

BIOGRAPHICAL NOTICE OF THE LATE MR. DODD.

[The loss which the Association has sustained by the decease of Mr. Dodd, of Ryde, (late of Chichester,) one of its warmest supporters and most distinguished members, was briefly announced last week. The subjoined notice by a gentleman who had opportunities of knowing his worth and estimating his talents, will, we doubt not, prove interesting to the Members of the Association.]

Died, at Ryde, Isle of Wight, Jan. 30th, having just entered the 45th year of his age, Ambrose Thomas Sturges Dodd, Esq., Fellow of the Royal College of Surgeons of England, and formerly surgeon to the Chichester Infirmary.

Mr. Dodd was the son of the late Rev. Moses Dodd, of Fordham, in Essex, and was born at Chichester, January 16, 1803. In his early days he displayed no particular talents beyond considerable intelligence, but he was of active mind and habits, and very early evinced that remarkable amiability of disposition which so strongly characterized his after life. While a boy he conceived a most restless desire for a sea life, and at the age of 13 years, was permitted to take a voyage to China, a circumstance he ever after reverted to with pleasure and amusement. Shortly after his return he decided on the profession in which he was destined to attain so high a reputation, and he commenced his medical studies with the late Mr. Lightford, of Oxford Street. While there he had a serious and dangerous illness; it was some form of thoracic inflammation, but, as was the case with his subsequent ailments, the exact nature of the attack was involved in some obscurity.*

He subsequently entered Guy's Hospital, where he distinguished himself as an intelligent and persevering student, and soon acquired such a standing that he was appointed Curator of the Museum, and Demonstrator of Anatomy. His connection with Guy's was between five and six years in duration.

In 1828, he was invited by Mr. Guy, a general practitioner at Chichester, to join him in his practice, to which he subsequently succeeded. Within a few months of his first coming to Chichester, he was appointed surgeon to the Infirmary of that place, a situation he held with much honour and success. He devoted himself to this Institution with so much zeal, and with so great satisfaction to the governors and subscribers, that on his eventually retiring from his office, he was presented at a public meeting convened for the purpose, with a piece of plate and a magnificent purse, in token of the high estimation his services had obtained, and of the respect in which he was held.

While at Chichester, he also took a warm interest in the Literary Institution of that city, in which he delivered several interesting and instructive lectures. He was also very active in the formation of the Institution Museum, particularly the ornithological department, which he collected and arranged.

Mr. Dodd suffered habitually in the spring and early summer from hay fever. This, for many years, continued to be increasingly severe, until in the summer of 1843, he became seriously out of health, suffering from coryza, with cough and general debility. While taking change of air and relaxation by the sea side, he was attacked with hæmoptysis. He had had a similar attack thirteen years previously, from which he recovered, and enjoyed subsequently tolerably robust health, but from the attack in 1843 his health declined. During the next two years, a voyage to America, and visits to Ryde and Clifton, with improved health, were alternated with returns to Chichester and practice, with relapses of his attacks of hæmoptysis, and increase of cough, accompanied with dyspnœa. In 1845 he determined on giving up his practice, and fixed himself temporarily at Ryde, where shortly after he was invited to join in an established practice. Some improvement in health stimulated him to his wonted energy, and in December, 1845, he called a public meeting for the purpose of establishing an Infirmary for the Isle of Wight. He himself accepted the duties of secretary to the undertaking, which soon prospered in his hands, and a large sum has been subscribed for the purpose. Although Mr. Dodd has not lived, even to see the foundation laid, he may yet be said to be the founder of this Institution, which may be looked upon as his last and posthumous work. It is a matter of deep regret in the Isle of Wight, that the yet embryo Hospital is deprived of his valuable aid.

In August last, while in better health than he had enjoyed for a considerable period, the hæmoptysis recurred. This attack proved more severe than any previous one, and from it he very slowly and only partially recovered. As soon as he was able he removed for a few weeks to Trent, in the neighbourhood of Tunbridge Wells, whence he returned in October, and resumed his practice. But this was now a labour ill-sustained, and during the last week in December he was compelled to keep his house. From this time his disease made rapid progress.

In the practice of his profession Mr. Dodd was always *au niveau* with the day, and he possessed a quick and ready discernment. As a surgeon, he was bold and enterprising, and evinced much tact and dexterity in operating. In his intercourse with his professional brethren he was always frank and honourable, and obtained a high rank in the good opinion of his compeers. He was an early member of the Provincial Medical and Surgical Association, to which he was much attached, and at the Anniversary Meeting held at Southampton, in the year 1840, the Retrospective

* It is probable that in this illness he contracted the adhesions mentioned in the account of the *post-mortem* examination.

Address on Surgery was read by him. He contributed frequently to the periodicals of the day, and furnished able articles to Dr. Todd's "Cyclopœdia of Anatomy and Physiology."

Mr. Dodd was married in 1832, and has left a widow and four children to deplore his loss. In his domestic relations he possessed very strong affections. He was much beloved by all who enjoyed his friendship, and very highly esteemed by a large circle of acquaintance. He bore his illness with patience and resignation, and met his death with all the fortitude inspired by a Christian's hopes.

Mr. Dodd was many times seen by some of our leading stethoscopists, and as these gentlemen had generally expressed great doubts as to the real nature of his case, he expressed a wish that his chest might be examined, which was accordingly done by his partner, Mr. Marriott, in conjunction with his friends Dr. Engledue, of Portsea, and Dr. Salter, of Ryde. The following is the result:—

Examination forty-nine hours after death. Whole body extremely attenuated. On opening the chest, only a small part of the left lung collapsed. The lungs generally were very much charged with carbonaceous matter, and with the exception of the posterior part of the right lung, studded with tubercles. The pleura pulmonalis and pleura costalis were nearly throughout adherent, mostly by old adhesions. Under the right clavicle the adhesion was densely fibrous, and the corresponding portion of the lung contained also much fibrous deposit, in addition to the tubercles which were more numerous on this side than on the left. The tubercles under both clavicles were in the state of softening, and there were several small cavities; the largest, on the right side, was about the size of a walnut. There was much gravitation in both lungs posteriorly, but principally in the right, where the greater portion of the posterior lobe was gorged with blood and was very friable. There was, however, in this situation neither fibrous nor any other deposit, except the infiltration of blood, nor hepatization or any adventitious growth, though it was in this situation, and this only that disease had been long suspected. The heart was pale and flabby but presented no appearance of disease.

General Retrospect.

PATHOLOGICAL CHEMISTRY.

COMPOSITION OF THE BLOOD IN PUERPERAL FEVER.

M. Hersent, who has taken this investigation as the subject of his inaugural thesis, terminates his researches with the following conclusions:—

1. The chief modification of the blood in severe puerperal fever consists in a great increase in the water; great diminution of the globules; and also in very considerable decrease of albumen.

2. These modifications are proportionate to the severity of the disease.

3. The proportion of fibrin is generally unaltered, and the blood is therefore not diffluent.

4. There are, nevertheless, some few cases in which the blood is more fluid than natural, in consequence of a loss of fibrin.

5. It is probable that the vitiation of the blood precedes the development of the disease.—*Recherches sur la Composition du Sang dans les Fièvres Puerperales* 1845.

COMPOSITION OF THE BLOOD IN CANCEROUS DISEASES.

Dr. Florian Heller has investigated the chemical and microscopical characters of the blood in a case of uterine cancer, and gives the following as the result of his enquiries:—

1. The blood-globules are of very variable size, some being smaller, others larger than natural; the smaller have generally a finely granulated outline, the larger are always smooth. As this condition is also observed in blood containing pus, it is not characteristic of the cancerous diathesis.

2. Cells perfectly analogous in form and size to those which are present in cancerous tumours, are also seen to exist in the blood.

3. The shining particles like fragments of gold are sometimes also met with. These particles vary much in aspect, being either yellowish or bluish, according as the field of the microscope is placed in respect to the light; they are in many cases perceptible to the naked eye, after coagulation of the blood, either in the clot itself, or floating on the surface of the serum.

4. The fibrin is constantly and absolutely augmented in all forms of cancer, whether the blood be obtained from the affected part or from the general system.

5. The albumen is either normal or below par.

6. The amount of solid matters generally is diminished. *Archiv. für Physiologie und Microscopie*, 1846.

PATHOLOGY.

ON THE CAUSES OF EXUDATION.

The author of an essay on this subject, Dr. John Hughes Bennett, observes, that the term exudation is applied not only to the act of passing out of the liquor sanguinis through the vascular walls, but also to the deposit in the tissues of the fibrinous portion of the blood. This confusion of the act and the result under the same term is, however, a failure in terminology, which is not confined to the point in question. The series of changes which precede exudation, are stated by Dr. Bennett, to be:—1. A narrowing of the capillary vessels, with consequent increased rapidity of circulation. 2. A subsequent dilatation of the same vessels, with retardation of the current. 3. Irregularity and oscillation of the current of blood. 4. The motion of the blood ceases, and the vessel appears fully distended. 5th and lastly, the liquor sanguinis, sometimes accompanied by the blood-corpuscles, is exuded through the capillary walls, which in the latter case are ruptured.

Dr. Bennett remarks, that this view of the changes preceding exudation, is perfectly in analogy with the effect of stimuli on other muscles,—namely, at first increased contraction, and afterwards paralysis, and is therefore sufficient to account for the initiatory portion of the process, the contraction and dilatation of the

vessels, with the increased and retarded flow of the blood, but it does not account for the stoppage of the blood, nor for the exudation.

The latter phenomena are generally attributed to obstruction, the blood-globules becoming merged together. This explanation, however, Dr. Bennett considers opposed to observation; for, 1st—the stoppage of blood does not, as is supposed, proceed from one point; and 2nd—the lymph space near the walls of the capillaries is still evident when the blood moves slowly, and only disappears at the moment it is arrested. He then examines the theory advanced by Dr. Williams and Mr. Addison, that the obstruction is due to the generation of a large number of colourless corpuscles which adhere to the sides of the vessel. He observes, that he has long doubted the truth of this assertion, and has recently performed experiments, the result of which convinces him of its fallacy. He thinks that the above named physiologists may have been deceived by the rendering distinct of the nuclei of the epidermic cells in the web of the frog's foot; which nuclei closely resemble the colourless blood-corpuscles. The explanation, the author observes, is also negatived by the recent investigations of Remak, who has noticed that the proportion of the colourless corpuscles is increased by abstraction of blood, and that the portions first drawn in inflammation contain very few. Dr. Bennett concludes, therefore, that the cause of the obstruction is yet to be discovered, unless we are content with the hypothesis of increased attraction between the blood and the parenchyma. In the last place, Dr. Bennett criticises the opinion of Dr. Robinson, that exudation is caused by lateral pressure exercised on the walls by the *vis a tergo*. He denies the trustworthiness of Dr. Robinson's experiment of tying the renal vein, and asks whether the changes in the capillaries are not due to direct mechanical irritation, (drawing the kidney out of the abdomen,) with exposure to the air. *Monthly Journal of Medical Science*, January, 1847.

CANCER OF THE BONES.

M. Nelaton, who has contributed materially to the elucidation of this disease of the osseous system, distinguishes four forms of cancer:—

1. In the first, nodules of cancerous matter are found in cavities in the interior of bones, which they exactly fill; the osseous tissue is in these points entirely destroyed. In the vicinity of this loss of substance, the bone does not appear to have undergone any alteration beyond a trifling increase of vascularity. As the disease progresses, the mass of cancerous matter increases in size, and at length forms a greater or less prominence on the external surface of the bone. In the long bones the cancerous matter frequently extends up the medullary cavity, a fact which is to be taken into account in performing amputation.

2. In the second form, the *osteo-sarcoma* of authors, the tissue of the bone has undergone profound alteration; it presents a voluminous swelling, the section of which exhibitis a number of irregular cellular spaces, filled with cancerous matter, in various degrees of softening. The bony tissue between these compartments appears to be rarified.

3. The third form is that in which cancerous matter is deposited in the interior of a bone, and in its development pushes the bony tissue outwards, which yields gradually, and becomes at length so thin as to form a mere shell, within which the cancerous matter is inclosed. This is the *spina ventosa* of authors.

4. In this form the cancer is developed external to the bone, and beneath the periosteum. But it is readily seen that the bone is altered; in fact it gives rise to a net-work of osseous matter, mingled with spiculæ, which projects into the cancerous deposit.—*Gazette des Hôpitaux*, Decembre, 1846.

PRACTICAL MEDICINE.

BLISTERS IN CONFLUENT SMALL-POX.

M. Piorry has for some time past derived great assistance from the use of blisters as a means of preventing the scarring of the face by the cicatrices of confluent small-pox. The pus, retained so long in contact with the tissues, and altered in character through the agency of the air which passes through the pustules by endomosis, causes extensive local destruction, and proves very injurious to the system when re absorbed. Various practitioners have proposed measures for obviating this inconvenience, as by cauterization of each pustule, (impossible in the confluent disease,) the opening them by scissors, needles, &c., &c. Experience, however, shews that over such means the blister has the advantage of—1st, opening at one time the whole of the pustules over which it is applied; 2nd, evacuating their entire contents, and preventing the consequences of the sojourn or re-sorption of pus; 3rd, counteracting the attendant erysipelas by diminishing the swelling; and, 4th, causing the scabs to fall off much sooner from the face than from other parts of the body. It has an advantage over mercurial plasters in not risking the excitement of salivation, the extent of evil which results from its use being a slight ischuria. The various plasters applied as abortives in this disease have been reproached with exerting a repellant action, and directing the morbid action upon the brain and its membranes. A blister, on the contrary, rather acts as a derivative.—*Medico-Chirurgical Review*, Jan., 1847, from the *Gazette des Hôpitaux*, No. 101.

ALUM IN PERTUSSIS.

Dr. Davies thus speaks of the employment of alum in pertussis:—After a long trial, I am disposed to attach more importance to alum, as a remedy in hooping cough, than to any other form of tonic or anti-spasmodic. I have often been surprised at the speed with which it arrests the severe spasmodic fits of coughing; it seems equally applicable to all ages, and almost to all conditions of the patient. I was formerly in the habit of taking much pains to select a certain period of the illness for its administration, and of waiting until the cough had existed at least three weeks, taking care that the bowels were open, the patient free from fever, the air-passages perfectly moist, and the disorder free from complication of any bruit. A continued observation of the remedy, however, has induced me to be less cautious, and I am disposed to think, that a very large amount of collateral annoyances will

subside under its use. The fittest state for its administration will be a moist condition of the air-passages, and freedom from cerebral congestion; but an opposite condition would not preclude its use, should this state not have yielded to other remedies. It generally keeps the bowels in proper order, no aperient being required during its use. The dose for an infant is two grains three times daily; and to older children, four, five, and up to ten or twelve grains may be given, mixed with *Syrupus Rhœados* and water. It is seldom disliked.—*Underwood's Diseases of Infants*, last Edition, p. 432.

CHLORATE OF POTASS IN SALIVATION.

Mr. Alison states, that having had many opportunities of observing the beneficial effects of the internal use of the chlorate of potassa, ($KO.ClO_5$,) in the various forms of pure anæmia, in which the intolerance of mercury is notorious, he was led to believe that as these closely resemble in many particulars the state of system produced by the full action of mercury, the medicine might be equally beneficial in the latter, and that the result of numerous trials exceeded his expectations. He warns us, however, that certain precautions are necessary in the use of the chlorate, as if it be given in injudiciously large doses, or for too long a time, it is apt to give rise to inflammatory symptoms. He thinks that it and mercury are antagonistic in their action.—*Medical Gazette*, Nov., 1846.

NEW REMEDY FOR MERCURIAL SALIVATION.

An American physician, Dr. Robertson, of Harrodsburg, has discovered that one of the commonest plants of his district, the *Ambrosia trifida*, has more prompt remedial powers in cases of excessive ptyalism, than anything he had previously tried. The patients are described as being generally relieved in six or eight hours of the more urgent symptoms, and completely cured in two days. The preparation employed is an infusion of the green leaves used as a gargle. Dr. Robertson suggests that the plant may also be found useful in other profluviæ, as leucorrhœa. The plant is known under the popular term of horse-weed—horse-mint. Dr. Robertson was induced to try it from observing that it completely cured a horse affected with slabbering. The effect is simply local.—*American Journal of the Medical Sciences*, October, 1846.

BISMUTH IN DIARRHŒA.

Rayer uses the tris-nitrate of bismuth in the diarrhœa of phthisical patients, and in that which occurs in typhus, with great success. It is also much employed in the diarrhœa of infancy.—*Gazette des Hôpitaux*, September, 1846.

Guérard recommends, under similar circumstances, injections of nitrate of silver, ten grains to the quart of water. In children the strength should be diminished. *Monthly Journal of Medical Science*, January, 1847.

CHENOPODIUM OLIDUM IN AMENORRHŒA, &c.

Mr. Houlton states that he has had frequent opportunites of watching the medicinal action of the Chenopodium olidum, and is perfectly convinced that it is a very safe and important remedy, in many cases in which the catamenial function is not duly performed. He employs the spontaneously evaporated extract in the form of pills, from five to ten grains, night and morning. In general, if the pills are taken regularly for a fortnight previously to the expected return, the beneficial effect of the medicine is manifested; should this not be the case, he repeats them in the same manner,—that is, for a fortnight previously to the expected change. He does not advise this medicine to be given in all cases in which the catamenial flux is suspended, for there are many cases in which attention to the general health will effect a cure, which it would be superfluous to detail. It is in those cases in which the uterus itself requires medicinal aid that the peculiar benefit of the chenopodium is shown.—*Medical Times*.

SURGERY.

TREATMENT OF PROTRUSION OF A WOUNDED INTESTINE.

When a wounded intestine protrudes, surgeons are by no means agreed as to what practice should be adopted. Among the older surgeons, Heister, Garengeot, De la Faye, Dionis, Sharp, Palfin, and others, inculcated returning the intestine without suture when the wound is small. Le Dran and B. Bell, on the contrary, recommend the smallest orifice through which the contents of the gut could escape to be sewed up. Among modern surgeons, Mr. Travers, though he concludes from experiments that very small wounds may with safety be returned, yet recommends the wound, however small, to be secured by suture, though M. Jobert represents him as attributing with Scarpa the most mischievous consequences to sutures, and utterly rejecting them. ("Traité des Malad. Chirurg. du Canal Intest., t. i., p. 73.") Mr. Lawrence dispenses with the suture in mere puncture, but recommends its employment if fæces could possibly escape through the aperture. Boyer considers the suture indispensible in wounds of the intestines exceeding four lines in length; Richerand rejects it in wounds not more than two or three lines long; Vidal de Cassis recommends its application when the wound is two lines long; and Jobert says we may safely return a wound three lines long, and, *á fortiori*, a puncture, even though a little fæces exude from it. Callisen, Richter, Marjolin, Begin, and Gibson, say that the suture should not be applied in small wounds of the intestines, but none of them specify what extent of wound may safely be left to nature; and Mr. Gibson, as if mistrusting his own precept, during an operation for strangulated hernia, successfully imitated Cooper and Lawrence, by tying a ligature circularly round a small aperture in the intestine. Mr. Syme speaks doubtfully on this matter, but thinks it prudent to make a point of suture when the wound exceeds a mere puncture. Finally, the suture is altogether rejected by some, as, for example, Scarpa; who, however, admits that a "timorous surgeon," afraid "to commit the whole to nature," might "with impunity, pass a ligature through the mesentery opposite the seat of the wound of the intestine,"—a proceeding, which others, with J. Bell, more timorous still, replace by stitching the wound of the gut to that of the parietes of the abdomen.—*Brit. and For. Med. Review*, Jan., 1847.

FORENSIC MEDICINE.

CLOSURE OF THE DUCTUS ARTERIOSUS.

The subjoined conclusions, by Professor Brenut, are quoted from a recent number of the *Medical Gazette* :—

1. If the child has lived only a *few seconds*, the aortal end of the duct appears contracted, and the vessel instead of being cylindrical throughout, acquires the form of a truncated cone.

2. If the child has lived for *several hours*, or a *whole day*, the duct becomes again cylindrical, although shortened and contracted in diameter. The size is about that of a goose-quill; it is therefore smaller than its root, and about as large as either of the two branches of the pulmonary artery, which have, in the meantime, become increased in size.

3. If the child has lived for *several days*, or a *whole week*, the duct contracts to a diameter of a few lines, about equal to a crow-quill; while the two branches of the pulmonary artery are equal in size to a goose's quill.

4. The duct is met with perfectly closed and quite impervious, at a much later period—*i.e.*, after the lapse of a very uncertain number of weeks, or even months.

Among the exceptional conditions, Brennt remarks that the contraction may be first observed at the cardiac instead of the aortal end. In one instance of a still-born child which was resuscitated, and breathed freely for a short time, and in which the thymus gland was absent, the duct was found of the size of a crow-quill, as in children which have lived for several days. He also states, on the authority of Joseph Schallgruhu, that the duct is sometimes entirely absent.

NEW METHOD OF DISTINGUISHING ARSENICAL STAINS FROM THOSE OF ANTIMONY.

M. Cottereau proposes a new proceeding for the above purpose, which consists in submitting the stain to the action of the vapour of phosphorus. The phosphorus is divided into small fragments, and placed on a plate, upon which the porcelain containing the stain is reversed. The experiment is conducted at the ordinary temperature. Spots produced by the arsenic disappear after a few hours, while those of antimony remain from twelve to fourteen days. These also disappear at length, but re-appear as the red sulphuret of antimony, by the exposure to vapour from a solution of hydro-sulphuric acid. Arsenical spots thus treated re-appear with the characteristic yellow of the sulphuret of arsenic.—*Gazette Médicale*, No. 37, 1846.

OPERATION FOR SCIRRHUS OF THE LEFT BREAST PERFORMED DURING THE INHALATION OF SULPHURIC ÆTHER.

By W. Philpot Brookes, M.D., M.R.C.S., Surgeon to the General Hospital and Dispensary, Cheltenham.

Having occasion to perform the operation of extirpation of the left breast for a scirrhous tumour, but in which the glands of the axilla had not become diseased, I gladly availed myself of this the first opportunity I have had of trying the effect of the inhalation of æther, and its being the first time it has been used in this town for any capital surgical operation, (although Mr. Tibbs, the dentist, had succeeded with it for the extraction of stumps of teeth,) I invited the following members of the profession to be present:—Dr. T. Smith, Mr. Eves, (one of the surgeons to the Hospital,) Mr. Dalton, Mr. Ocrell, Mr. Fagan, Mr. Tibbs, surgeon-dentist, Mr. Gregory, and Mr. Peart.

The great importance of this invention as regards operative surgery, renders it necessary that surgeons should make known all the cases that come under their observation, and on that account I have given the full notes of this one.

The inhalation of the sulphuric æther was kindly managed for me by Dr. T. Smith, (one of the physicians to the Hospital and Dispensary here,) who administered it with a simple gum elastic tube, with an ivory-mouth pipe attached to a damp bladder, placing in it about two ounces of æther, and putting the bladder in warm water. The æther used was Howard's sulphuric, which had been washed and re-distilled by Mr. Smith, chemist, of this town. At first we had some trouble to persuade the patient to inhale properly, but after a short time, and becoming herself anxious to have the operation performed, she did so vigorously, and the æthereal effect was produced in about four minutes from that time. She fell back in bed, the arms dropped to her side, the pupils dilated, eyes turned up to the orbit, and sensibility apparently gone.

I commenced my operation, which was performed by two elliptical incisions of about four inches in length, extending fully round the nipple to the border of the axilla, dissecting out the disease; one small artery had to be tied. The operation occupied about two minutes.

After the lapse of six minutes the patient recovered her consciousness, and when asked if she had felt any pain, said, "None whatever,—you have not done the operation, you are only deceiving me," and we had some difficulty to persuade her to the contrary; in fact, she would not credit it until I gave her the breast to look at. Since the operation she has been questioned by several parties how she felt, and her answer is, "It was a pleasant sensation, no pain of any kind, and she could not now even believe it possible the disease was cut out with a knife."

The patient had not any bad symptoms from the æther either during its inhalation or afterwards. The pulse rose from 80 to 125; she complained shortly after of a little pain in the region of the heart, but this left her in a short time; one wine glass-full of brandy and water was given her after the effect of the æther had left, and at night the pulse was soft, 100; patient very tranquil; skin moist; complains of some difficulty in voiding the urine. A sedative draught was given her.

All the gentlemen present, whose names I have deemed it advisable to give, felt perfectly satisfied that the operation was performed without the slightest sensation of pain or uneasiness, and expressed themselves highly gratified with the result.

On reviewing the cases of operations already performed under the influence of æther, we cannot regard

the invention in any other light than as one of the greatest boons ever offered to operative surgery, in alleviating the greatest distress of mind and body which patients always suffer when they are told they must undergo a surgical operation, and it must now become the duty of every surgeon to watch well the progress of this remedy, and judge for himself whether or not it is not capable of being brought into very general use. I am only sorry the talented inventor should have clogged it with a patent, which I trust will never be allowed to stand; he deserves a far higher reward than that of turning it to a mere mercantile production.

I cannot close this article without publicly thanking Dr. Smith, for the trouble he has taken in trying the effect of æther on healthy subjects, preparatory to giving it this patient, and the judicious manner in which he administered it for me.

Albion House, Cheltenham,
January 28, 1847.

INHALATION OF THE VAPOUR OF ÆTHER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I can imagine your readers to be almost saturated with "*Æthereal vapour*," in consequence of so much public attention having been directed towards this powerful agent; nevertheless, should you consider the accompanying comments, emanating from one of the oldest members of the Provincial Medical and Surgical Association, in any manner worthy of notice, they are at your service.

I understand it is generally admitted, that the chief difficulty that has attended the process of inhalation, has been the violent spasms and cough that accompanied it; and in some cases the operation has been brought into disrepute by the cerebral disturbance produced. I witnessed two cases last week at the Royal Berkshire Hospital of tooth-extraction in young females, and in each case there were considerable paroxysms of coughing when under ætherization; indeed, so much so, as to render them almost unsuccessful. I had a tooth removed afterwards by the house-surgeon of the Institution, being entirely unconscious of the operation when under the influence of the vapour, administered by Hooper's apparatus. From what I have read and witnessed in reference to this subject, and more particularly from what I have experienced by inhalation, the effect of which was charming after the *first* stage of *coughing* and *suffocation* had disappeared, by no means to be considered trifling, and only to be explained by persons who *have* experienced it, I cannot but imagine the chief difficulty would be remedied, provided the operator has the means of adminstering the æther in the *smallest* proportion at the *onset*, either by regulating the stop-cock or valve, as may be most convenient, or in a diluted state, as has been recommended, to direct the patient to inhale for the first minute or so, as softly and gradually as possible, and above all, not to hurry the operation by the introduction of the vapour too rapidly; for, with regard to the success of it, quite as much depends upon the manner of inhaling, as it does upon the operator who administers it.

I remain, Sir,
Your obedient servant,
S. W. KIDGELL.

Pangbourn, Reading,
February 9, 1847.

AMPUTATION PERFORMED UNDER THE INFLUENCE OF ÆTHER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The cases in which the inhalation of the vapour of sulphuric æther has been successfully employed in the provinces, for the purpose of rendering patients insensible to the pain of surgical operations, are now so numerous that it seems almost superfluous to record another, especially as the instances in which this powerful agent fails to produce the desired effect, or is attended with unfavourable or dangerous symptoms, are more instructive to the profession, and therefore better entitled to a place in your columns. I am, however, induced to send you the following case, which you can either insert at length or shortly announce in your usual summary:—

Mr. Neate, master of the British School, at Corsham, a few years ago, met with a severe accident by machinery, and was obliged to have his left arm amputated, about the middle of the humerus. As the bone protruded an inch and a half, and was merely covered by very thin skin, the patient was desirous of having a less painful and a more sightly stump. He suffered a great deal of pain during and subsequent to the first amputation, and therefore was very anxious to try the effects of æther. Mr. Washbourne, of this place requested me to assist him in the administration of the vapour and the operation. A common inhaler was employed, some pieces of sponge being placed in the æther, and a small piece so as to prevent any of the fluid entering the breathing tube. Three minutes *perfect* inhalation were sufficient to produce intoxication; another minute (as the flap operation was performed) was of course only required to effect the removal of the parts necessary for the formation of a new stump.

There were several small arteries to be secured by ligature, and the veins bled more freely than usual, and consequently delayed the dressing of the stump, a circumstance which I mention because I see in a report of some experiments upon animals under æthereal influence, just presented to the Academy of Sciences at Paris, that æther produces congestion in the veins and capillary vessels; and this state we might naturally expect to follow a great and sudden diminution of arterial action, as indicated by the state of the pulse, &c.

The inhalation was repeated two or three times; the patient was quite ravenous for its continuance, and in

proof that his muscular powers were very little diminished, it required some little force to take the inhaler from him. He felt no pain nor subsequent inconvenience, although ætherealized for more than half an hour. He not only heard but was the first to reply to any remark made in the room, and at times with a degree of levity somewhat amusing.

This is the fourth day after the operation. The stump has been dressed; it is partly healed, and the patient highly pleased with the result.

I am, Sir,
Your obedient Servant,
G. W. DYKE.

Corsham, Wilts, February 16, 1847.

EMPLOYMENT OF MATICO IN MALIGNANT DYSENTERY, AND IN WOUNDS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I cannot resist the privilege allowed me by Dr. Hartle, of making known, as speedily as possible, the good effects of matico, so judiciously employed by him in cases of epidemic dysentery, accompanied with profuse intestinal hæmorrhage. As the communication is of importance, and has been so kindly transmitted to me, uncalled for and unexpectedly, I shall feel personally obliged, if you will afford it early insertion in our provincial periodical publication.

Will you allow me also to avail myself of this opportuuity of stating, that the previous day's post brought me "A correct and amended List of Bosquet's Medicinal *Hydroids*, or Concentrated and Chemical Solutions of the Organic Alkalis," in No. 32 of which is that of matico. The dose is only from one to two drachms, or eight times the strength of my form of decoction, a novel mode of exhibition, which may prove a valuable improvement, and convenient for those who may not have access to the dried article itself.

I am always, yours faithfully,
THOS. JEFFREYS.

Great George Square, Liverpool,
January 26, 1847.

Port of Spain, Trinidad, West Indies,
20th December, 1846.

My dear Sir,—My druggist, of London, kindly sent me some of the Piper angustifolium, (Matico,) accompanied by the third edition of your remarks on the efficacy of this Peruvian styptic. It fortunately arrived at this time that a most malignant dysentery was prevailing in this town. The disease was ushered in with pyrexia, and the most malignant concomitant symptoms of the malady, accompanied by profuse hæmorrhage from the bowels, with extreme relaxation of the sphincter ani. In some of the cases tenesmus was distressing, while in others there was no pain whatever; yet in all, the blood was constantly streaming from the rectum, while the anus was extensively dilated. The Spaniards, aborigines of this island, call this disease, where it assumes such a malignant type, with dilated anus, "bischeo;" and they solely depend, as a restorative, on the use of lime-juice, taken as lemonade, *ad libitum*, glysters of lime-juice and water, baths of the same, and the dilated anus is plugged with a lime, which is nicely peeled, then cut round from the core, inverted, and introduced into the rectum. No inconvenience, pain, or difficulty, attends the introduction of the lime, for the sphincter ani appears to have lost all sensibility and power of contracting; for as fast as one plug is ejected another is immediately introduced.

The first patient I had suffering under this malignant type, was a youth, seven years old, son of a merchant in this town. My preliminary treatment consisted in clearing out the primæ viæ with an infusion of radix ipecacuhanæ, and immediately after I commenced the lime-juice treatment, (until I could obtain my matico from the vessel,) which I persevered in until the fifth day, when, finding my little patient was losing ground, that the hæmorrhage was increasing, and that the dilation of the rectum was more alarming, I instantly commenced with an infusion of the matico, (one ounce to the pint of boiling rain-water,) and gave a tablespoonful every third hour, and a glyster of the same infusion one hour after he had taken each dose of the infusion. His recovery was rapid, and a few days after he became convalescent, he quitted this place with his parents, and arrived safely in England.

The next case I had was a child of eighteen months old. The symptoms were in all respects the same as I have already stated, with the difference of pain; the first patient had very little, and that without tenesmus; this infant suffered severely whenever he had the inclination to stool, yet nothing was passed but blood. In this case I began with the infusion of ipecacuhana; and as soon as the little patient had recovered from the effects of the vomiting, I commenced with the infusion of matico, in doses of one teaspoonful every second hour, and one ounce of the same infusion to be injected into the dilated anus, one hour after taking each dose. The change which took place in the malady in twelve hours was far beyond my most sanguine expectations; the sphincter ani had recovered its sensibility and contracting power, and the child is now in perfect health.

I have chosen to give the summary treatment of these two cases, because they were my first; and again, they were children; yet I must state, that in like manner I treated every case (with the matico,) of this malignant malady that came under my care; and it is with satisfaction that I report its proving successful in every instance.

Two cases of wounds came under my care:—

Mr. John Coune. This man received by accident, a severe wound from a large iron wheel falling, the edge of which divided the scalp on the lower and front part of the right parietal bone, dividing a branch of the temporal artery, which caused a profuse and alarming hæmorrhage The mouth of the vessel was so visible, that no trouble could attend taking it up, but it was too good a case to allow to pass without giving a trial to the matico, and accordingly I applied a piece

of a leaf to the mouth of the vessel, and pressed it closely for some time. On removing my finger I found the bleeding was arrested; I remained for some minutes before I dressed or bandaged it, no bleeding took place, and in nine days the wound was healed, and the man returned to his work as a blacksmith.

Mrs. Murser. This woman accidentally received a wound on the thick part of the thumb, two inches long. When she came to me the wound was bleeding most profusely from two small arteries, which I could very easily have taken up, but as I was anxious to give the matico another trial, I immediately applied a piece of leaf, which covered the mouths of both vessels, and by pressing the edges of the wound on the leaf for a few moments the hæmorrhage ceased. I then put a piece of adhesive plaster round the hand and wound, leaving the piece of matico in the wound. On the fourth day I opened it, when I found the piece of leaf detached and the wound uniting generally. On the ninth day it was completely healed; and now, three weeks since, it continues so, without any inconvenience.

I beg to assure you that I shall continue to avail myself of every opportunity of using the matico, and I shall have much pleasure in communicating my observations. Permit me to say that you are at liberty to make any use you please of these observations, and with every hope that they may prove useful,

I remain, my dear Sir,

Your most obedient servant,

ROBERT HARTLE, M.D., F.R.C.S.E.,

H. P. Deputy Inspector General of Army Hospitals.

To Thomas Jeffreys, Esq., M.D., &c.,
Liverpool.

ON SCORBUTUS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

It seems generally admitted that true scurvy is now of rare occurrence,—that it is one of those diseases which the operation of an amended dietary, or of some other change in the general habits of the people of this country has happily nearly extirpated. That this may be mainly owing, as has been stated by some, to potatoes having become a staple article of food for many years seems not improbable; and if the reappearance of scurvy should unhappily be amongst the *mille mali* consequent upon the failure of the potato crop for the last two years, all the force of proof will be given to the opinion.

Be this as it may, I had not seen a case of scorbutus for the last twenty years, when about two months ago my friend Mr. Ince, surgeon to the County Gaol here, requested me to see with him three male prisoners then labouring under the disease in an aggravated form; extreme general debility, fœtor of the breath, teeth loose, turgidity and sponginess of the gums, livid subcutaneous spots and ecchymoses on the limbs and muscular contractions were among the symptoms. One of them, a man of dropsical habit, died; the other two recovered and are now quite well.

Nitrate of potash internally, and the chloride of calcium in solution externally, were evidently productive of benefit; but the beneficial effect of change of diet was demonstrated in a very striking manner. In consequence of the scarcity of potatoes, peas were ordered as a substitute in the prison rules, and under the use of the pea food the disease made its appearance. By a very proper regulation in the prison management the surgeon has the power of altering the diet, and Mr. Ince judiciously ordered bread instead of peas, with some porter also. This was immediately followed by improvement in the two cases, and after some time the peas food was resumed, when the symptoms returned, but again yielded to the amended diet.

These seem the only points of interest in the occurrence, and to enter into minute details of particulars would occupy your space and the attention of your readers uselessly.

I cannot, however, conclude without asking leave to express my concurrence in the decision come to by the Committee, to continue the Journal fortnightly. To those, who, like myself, feel a desire to submit a question, as it arises, to the judgment of a numerous and influential body of practitioners like the Provincial Association, the Journal affords the easiest, best, and pleasantest mode of making the communication.

I am, Sir,

Your obodient servant,

A. W. DAVIS.

Presteign, Jan. 20, 1847.

MANIPULATIONS OF A CORN-CURER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Having read in your valuable publication, for December 23rd, 1846, p. 615, a communication headed "Committal of a Corn-Curer for obtaining Money under False Pretences," I now take an opportunity of stating the result of the trial of the chiropodist, and forward to you, for the information of my professional brethren, a particular detail of the artist's mode of operation, and the result of it in the discovery of a nursery of corns, where the most eminent men in our profession appear never to have thought that they were ever grown.

Joseph Wolff, tried at the sessions for the county of Suffolk, held at Beccles, on the 4th instant, on a charge of having, in the borough of Southwold, in that county, on the first of December last, obtained from a gentlemen resident in that town, the sum of one pound by false pretences, represented in the calendar of prisoners as thirty-five years of age, a labourer of the city of Norwich, but who, by his hand bills, had represented himself as Dr. J. Wolff, chiropodist, patronized by a crowned head, and every grade of nobility and gentry, from the throne downwards, was acquitted by the jury on the ground, as it would appear, of insufficient evidence, arising, perhaps, out of the loss of materials, pretended to have been extracted as corns, and the difficulty of shewing that the whole sum

charged was a fraud, as what is usually called a corn had been operated upon, and the patient felt ease from it.

The theory of the chiropodist, as frequently stated, is, that corns are generated in considerable numbers in, and spring from, the bone immediately under what has never before been doubted to be a corn, and in order to the extraction of which, in the cases alluded to, and at which I was present, the following was the ceremony of operation:—Seating himself with his face towards the light, and taking care to object against any person placing himself in a situation distinctly to see the whole operation, the operator threw a handkerchief over his knee, upon which the foot of the patient was laid. The visible corn was then pressed somewhat unceremoniously, to give, it is presumed, the patient a sufficient idea of the pain occasioned by such things, and the value of the service rendered by the removal of them. The chiropodist then proceeded to pare the uppermost layer of the thickened cuticle of every corn upon the same foot, using a number of variously shaped scalpels. He then proceeded to loosen, by means of a set of instruments, like gum lancets of different shapes, and some of them much rounded, the entire natural corns, turned them up and on one side; then cut off the more callous part of each, leaving the under layer of the cuticle, of which he continued to form a sort of flap, which he subsequently made use of. With crooked scissors of various sizes, having clipped away all uneven surfaces from the different corns under operation, then with suitable solemnity the operator took from a round box a bottle of mysterious oil, somewhat resembling blood, which he represented as having the power to raise the corns. This oil was with abundant care rubbed over each toe operated upon, and into each excavation made in it until it foamed, and at this perhaps *critical period* of the operation, the operator *invariably* resorted to some manœuvre to attract the attention of any bystanders, and each flap before spoken of being carefully closed over the orifice, and the oil wiped from the outer part of the toes, the chiropodist then by means of an instrument, like a large silver tooth-pick, with great adroitness, disengaged what he called the corns, and brought them one by one to view, exclaiming—"See de corn." The object being thus made visible, the operator taking up a pair of long broad forceps, deeply grooved, and closing with a slide, proceeded to lay hold of it, and suiting the action to the *extremity of the case*, he affected to exercise the utmost judgment and care in the ceremony of extraction, which, having with apparent difficulty effected, the self-created corn was usually triumphantly exhibited, and its point applied to the back of the patient's hand, no doubt that its power to give pain might be felt. In conclusion, the flap before spoken of was trimmed off, and if there was any appearance of blood, the chiropodist applied small pieces of charpie, dipped in a yellowish brown astringent, and every toe operated upon was bound neatly up, and secured with adhesive plaster.

The Wolff corns, or the spiculæ designated by Dr. J. Wolff as corns, are horny, bristly, or bony substances, which may be manufactured, either of the parings of horses' hoofs, or the bones of fish; but I have great reason to believe they were manufactured from the parings of horses' hoofs. In length they are about one quarter of an inch, some jagged, some smooth, and some curved, and in size do not exceed that of a small pin. The members of our profession will have no difficulty in forming a correct opinion of his talent in practical imposition, which appears to have been carried nearly through the length and breadth, not only of our island, but into Ireland, to say nothing of the continent. In Ireland I have evidence of the extraction of eight pounds from the purse of a lady; and in my own immediate neighbourhood, of six pounds for twenty-five spiculæ. From London I have received various communications, and amongst them, of the extraction of fifteen guineas from two gentlemen residing in that fountain-head of medical and surgical knowledge, besides similar, and indeed greater impositions, practised elsewhere. The most gratifying communication, however, has been from Cheltenham, where it appears that the impostor for his mal-practises on the feet of his patients, was sent to exercise his own feet on the treadmill.

The object from first to last in the proceedings against Dr. J. Wolff has been to expose the absurdity of his theory, and the extent of his trickery, and the object of addressing to you this exposition of the mystery of his operations has been to shew the necessity of great caution, particularly in our profession, in certifying anything not well understood. In my own case I considered myself perfectly secure from imposition, not simply from the personal recommendation of Dr. Wolff by the gentleman whose house he had just left, but from a splendid book of certificates containing the autographs and seals of several noblemen, and printed testimonies from many members of high eminence in our profession, on which I could but rely as fully justifying a recommendation of the operator to my friends, by whom they were so grossly deceived, and the deception upon whom well warranted in my opinion the proceedings which I thought proper in justice to them to adopt.

ROBERT WAKE, M.D., M.R.C.S.

Southwold, Suffolk, January 18, 1847.

Medical Intelligence.

OPERATIONS PERFORMED UNDER THE INFLUENCE OF ÆTHER.

Operations continue to be successfully performed under the influence of æther at the Provincial Hospitals. Among them may be mentioned the removal of a scirrhous mamma, and of a portion of the middle finger, by Mr. Cotton, of Lynn; and a very severe operation on the foot with the most perfect success, at the Worcester Infirmary, by Mr. Carden; with others, by Dr. Brookes, of Cheltenham; Mr. J. H. Stallard, of Leicester; Dr. Barker, of Bedford, &c. &c.

MEDICAL APPOINTMENT.

Eusebius Arthur Lloyd, Esq., has been elected Surgeon to St. Bartholomew's Hospital, in the room of Mr. J. P. Vincent, resigned.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, February 4th:—William Philip Harrison, Sheffield; Edward Simpson, Swadlincote, Derbyshire; John Frederick Stevenson, Birkenhead.

Gentlemen admitted Licentiates, Thursday, February 11th:—William Cadge, Hoveton St. John, Norfolk; Richard Charles Skettle, Mapperton; John William Abell, Mitchell Dean; Henry Ashton Ramsbotham; William Weston, Ellaston, Staffordshire; Samuel Lawrence Gill.

OBITUARY.

Died, January 16th, at Nice, aged 43, M. Leon Mirza Labat Khan, Doctor of Medicine of the Faculty of Montpellier, Chief Physician to the Shah of Persia.

January 31st, aged 78, Lynch Conway Gent, Esq., Surgeon, Fenny Stratford, Bucks, in which town he had practised upwards of fifty years.

February 4th, aged 69, M. Dutrochet, a distinguished philosopher, well-known as the discoverer of the property of endosmosis.

Lately, M. Ranque, M.D., Chief Physician to the Hospital and Prisons, and Dean of the Faculty of Medicine of Orleans.

Lately, aged 73, M. le Baron Pasquier, Surgeon in Chief to the King of the French.

Lately, at Plymouth, aged 90, James Watt, Esq., Senior Surgeon of the Navy. Mr. Watt served as Assistant Surgeon and Surgeon, on board the *Ramilies* and other ships, in several naval engagements, under Keppel, Rodney, Saumarez, and Sir Richard Strachan.

METEOROLOGICAL JOURNAL FOR DECEMBER, 1846,

Observed at Uckfield, Sussex, By C. L. Prince, Surgeon.

			DEGREES.
Maximum Temperature in the Shade,	20th	. .	50.
Minimum ditto . . .	ditto 14th	. .	13.
Mean ditto . . .	ditto		32.79
Range of ditto . . .	ditto		27.
Mean daily Range . . .	ditto		10.54
Mean Maximum	ditto		38.07
Mean Minimum	ditto		27.51
Maximum in the Sun	5th	. .	55.
Minimum on the Grass	14th	. .	12.
Extreme Range			43.
Mean Maximum in the Sun			46.35
Mean Minimum on the Grass			25.06
Mean Dew-point, 9 a.m.			26.87

			INCHES.
Mean Pressure			29.819
Maximum ditto	30th	. .	30.51
Minimum ditto	23rd	. .	28.68
Range.			1.83
Depth of Rain			1.57
Evaporation			1.05

Prevailing Wind, North.

BOOKS RECEIVED.

Quarterly Return of the Health and Mortality in 115 Districts of England, for the Quarter ending December 31st, 1846.

The Microscopic Anatomy of the Human Body, in Health and Disease. By Arthur Hill Hassall, F.L.S., &c. &c. Part VII. London: Highley. 1847. 8vo.

Body and Soul; or Life, Mind, and Matter, &c. By George Redford, Member of the Royal College of Surgeons, &c. London: Churchill. 1847. 8vo. pp. 232. Plates.

The Nature and Faculties of the Sympathetic Nerve. By Joseph Swan. London: Longmans. 1847. 8vo. pp. 55.

An Inquiry into the Action of Mercury on the Living Body. By Joseph Swan. Third edition. London: Longmans. 1847. 8vo. pp. 34.

On Indigestion, and certain Bilious Disorders often conjoined with it, &c. By George Chaplin Child, M.D., Physician to the Westminster General Dispensary. London: Churchill. 1847. 8vo. pp. 219.

Observations on the History and Treatment of Dysentery and its Combinations, &c. By William Harty, M.D., Physician to the King's Hospital, and to the Prisons of Dublin, &c. Second edition. Dublin: Hodges and Smith. 1847. 8vo. pp. 303.

On Tumours of the Uterus and its Appendages. (Jacksonian Prize Dissertation.) By Thomas Stafford Lee, M.R.C.S.E., &c. &c. London: Churchill. 1847. 8vo. pp. 274.

The Half-Yearly Abstract of the Medical Sciences, &c. Edited by W. H. Ranking, M.D., Cantab., Physician to the Suffolk General Hospital. Vol. IV. July—December, 1846. London: Churchill. 1847. pp. 460.

TO CORRESPONDENTS.

Communications have been received from Dr. Belcombe; Mr. Barrow; Mr. K. Watson; Dr. Cotton; Mr. W. F. Clarke; The Birmingham Pathological Society; Dr. T. H. Barker; Mr. Prince; Dr. Orpen; Mr. J. H. Stallard; Mr. Crosse; Mr. Toynbee.

A Sexagenarin.—We have been much interested with the "Recollections," but fear they are scarcely suited to the pages of the *Provincial Journal.*

A Subscriber.—The only license which confers a legal right to practise as an apothecary in England, is that of the Society of Apothecaries. Lists of the members of the College of Surgeons in Ireland, and of the Licentiates of the Apothecaries' Company, Dublin, may, we believe, be obtained on application from their respective Secretaries.

It is requested that all letters and communications be sent to Dr. Streeten, Foregate Street, Worcester. Parcels and books for review, may be addressed to the Editor of the Provincial Medical and Surgical Journal, care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL
MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON CLINICAL MEDICINE.

By W. R. Basham, M.D., Physician to the Westminster Hospital.

Lecture VII.

Fatal case of acute Bronchitis, preceded by pulmonary or chronic catarrh: History of the case, and post-mortem appearances.—Distinction between pulmonary catarrh and bronchitis.—Catarrhal affections of the pulmonary mucous membrane; their frequent tendency to recur.—Pathological state of the mucous membrane in acute catarrh.—Catarrhal irritation always extends from above downwards, from the larynx to the bronchi, never reversely from the bronchi upwards.—Microscopic characters of catarrhal secretion.—Pathological characters of acute bronchitis; stethoscopic signs; secretion.—Plastic exudation in the severest forms of bronchitis.—Heart-disease, and pulmonary catarrhal affections, tend mutually to aggravate each other.

Gentlemen,—At our last meeting I had occasion to explain to you the pathological conditions of broncho-pneumonia; and at that time I made allusion to another case in the same ward, of a patient suffering from symptoms of acute bronchitis, but which had supervened upon a chronic affection of the mucous membrane of the air-passages, and from which he had suffered for some time, amounting probably in its earlier stage to little more than pulmonary or chronic catarrh, a complaint but too often neglected, from its being usually at first unaccompanied by any great disturbance of the general health, but which is constantly prone to pass into very serious and fatal lesions of the pulmonary tissues.

A. B.———, aged 40, a German watchmaker, was admitted on January 6th. He was suffering from urgent and suffocative cough; distressing dyspnœa; face livid from venous turgescence; profuse sputa; has suffered from cough and dyspnœa during the last two months; the cough has occurred in paroxysms; the countenance is very anxious; features turgid; lips livid; eyes protruding and glazed; intellect torpid; there is also general anasarcous swelling of the surface of the body, trunk as well as extremities. The chest appeared well proportioned, was resonant throughout, but more so than natural in the mammary and lateral regions of both sides; the respiratory murmur was not audible; cooing and wheezing sounds present in every region, but more particularly in the interscapular space; mucous rhonchi of large bubbles also in each region; the heart's sounds were rythmical, but somewhat sharper than usual. The bowels had been relieved; tongue moist; pulse 108, small and compressible; sputa very profuse, frothy, and stained with blood; urine very high-coloured, and loaded with urates.

These symptoms were palpably indicative of an inflammatory condition of the whole extent of the bronchial mucous membrane, and from the existence of cough and dyspnœa for two months preceding, it was considered as an attack of acute bronchitis, supervening on pulmonary catarrh. The nature of this complication will be presently explained. It was obvious that the treatment must be conducted on the principle of relieving the congestion of the bronchial mucous membrane, and by medicinal agency preventing the further throwing off the products of inflammatory action. To this end he was cupped between the shoulders to eight ounces, a mode of relief to the congestion of the pulmonary organs, in general very efficient, and in most cases of this kind preferable to general blood-letting from the arm. A blister was applied to the anterior part of the chest, and he was ordered Hydrarg. Chloridi cum Opio, utrq., gr. j., sextis horis, and the Mistura Salina Ammoniata, quartis horis. This latter medicine was prescribed with the view of obviating any tendency to prostration and collapse, as well as at this stage to promote secretion from the bronchial passages, with free expectoration, which object is well obtained by saline draughts with ammonia in excess.

On the 7th, the day following, the report states that he was relieved much by the cupping, and for an hour or two breathed freely and comfortably, the lividity of the countenance subsiding, and the expression being less anxious. He, nevertheless, passed a very restless night, with much wandering and moaning; and on the examination at the daily visit, cooing and sibilant sounds were heard everywhere, with much expiratory wheezing, and mucous rhonchi of both large and small bubbles. The sputa were very plentiful, frothy, fluid, and sanguinolent; urine loaded with urates; the pulse was very small, soft, and compressible, 90. Later in the afternoon the lividity and congestion of the countenance again returned; the respirations 48, hurried, gasping, and laborious. A remarkable amount of venous congestion of the vessels of the scalp appeared, which was followed by a state of coma, and he died at 4 a.m.

Sectio cadaveris twenty-four hours after death. The body was œdematous over the entire surface; plentiful serous exudation from every tissue as the knife passed through the abdominal and thoracic parietes; a moderate amount of clear serum was present in the cavity of the abdomen. The lungs did not collapse on raising the sternum, but were attached by firm bands of tissue to the pleura costalis; no trace of recent plastic exudation could be detected; the lungs on their anterior surface, and particularly about the middle lobe, presented many emphysematous patches, one or two of the size of a filbert; the margins of the inferior lobes were also covered with emphysematous vesication; the posterior and inferior portions of the lungs were dense, with cadaveric infiltration, a plentiful sanguinolent serum (frothy,) exuding freely on a section being made. The mucous membrane of the bronchial tubes was turgid and swollen, of an intense dark, madder-red colour, and from them into the lesser series the colour passed into a purplish violet, and presented the appearance as of intense venous hyperæmia; the larger tubes were smeared over with a glutinous, tenacious, and very adhesive secretion, and many of the smaller tubes seemed quite blocked up with this gelatinous mucus. It was of a faint fawn-colour, and at no point could any appearance of yellow muco-purulent secretion be detected. Under the microscope this exudation had a fibrinous appearance, and exhibited many granular cells; none could be found that presented any of the characters of pus-globules. The heart was much enlarged, but uniformly so; no valvular thickening nor opacity; the walls were relatively thin in respect to the increased capacity of the auricles and ventricles; it weighed twenty ounces. The liver was not unhealthy in appearance, presented indications of a large amount of portal congestion, and weighed forty-eight ounces; the kidneys were free from any morbid appearance, the right weighed six ounces, and the left five and a half. The brain was not examined.

This case explains to us many of the pathological conditions of pulmonary catarrh, bronchitis, and emphysema. Pulmonary catarrh is one of the most frequent and commonest precursors of the severer and more fatal forms of bronchitis. Pathologically it can be said to differ from bronchitis only in the amount and intensity of the preceding hyperæmia; the usual products of inflammatory action, pus, and plastic exudations, being the result of the more intense morbid action; while in the milder affection, epithelial cells, granular corpuscles, and fluid mucus, are generated and expectorated to a greater or less extent. To the latter the term catarrh, or pulmonary catarrh, is usually applied; while, to express the former, we employ the word bronchitis. I propose to examine the pathological conditions of these affections somewhat minutely, as the case before us presents me with a favourable opportunity practically to illustrate these morbid conditions.

Catarrhal affections of the mucous membrane of the trachea and larger bronchial tubes may be reckoned among the most frequent derangements of the system, and except in rare cases, are from the first treated as trivial, and receive no very great attention on the part of the patient; nevertheless, a condition apparently so trifling, and accompanied by no great amount of physical disturbance, may, by its tendency to recur again and again, under favourable circumstances, and often does, lead to serious mischief, and ultimately even to fatal consequences. According to the best authorities, in the earliest stage of acute catarrhal affection, distinct portions of the bronchial mucous membrane exhibit patches of a fine rose-red injection, which are not circumscribed by a definite boundary, but gradually become diffused, and insensibly lost in the surrounding pale tissue. This increase of colour arises from the injection of the capillaries of the spot, and expresses the condition of true, though limited, capillary hyperæmia. If the catarrhal irritation increases, the patches extend and coalesce, and the colour of the affected part becomes darker; and when the irritation has reached its maximum of intensity, the membrane assumes a bright vermilion-red hue. At this period there is a deficiency in the natural secretion of the membrane, and when the affection is seated high up in the wind-pipe, or extends no farther than the larynx, it is at this stage that hoarseness exists. It may be observed here that catarrhal irritation invariably proceeds from above downwards; and that, supposing the trachea to be the seat of the original catarrhal attack, there would be almost a certainty, that if it extended, it would descend to the bifurcations of the bronchi, rather than ascend to the larynx. This is more particularly noticed in epidemic catarrhs, where the original attack, commencing as coryza, and seated in the Schneiderian membrane, extends to the pharynx, thence to the larynx, and if the attack be severe and neglected, continues to the trachea and bronchi, and ultimately extends to the minutest branches of the air-passages. But the reverse is never observed, the catarrhal irritation never proceeds from within outwards,—from the smaller tubes upwards to the wind-pipe and larynx.

I have already observed, that in the earliest stage of the affection, there is a diminution, even total absence of the ordinary lubricating secretion of the part. The air irritates the undefended and irritable surface, and excites a dry, frequent, and harrassing cough. In the mildest cases, this state of capillary congestion and deficiency of secretion is soon followed by the pouring out of a thin pituitary fluid, which soon presents many minute grey points or striæ, mixed with many air-bubbles. Under the microscope, this secretion is observed to be composed of epithelial cells—even layers of them—in great abundance, suspended or floating in a clear mucous fluid, and often mixed with many granular corpuscles. Proportioned to the intensity of the preceding capillary injection, changes take place in the secretion; it becomes thicker, opaque, slate-coloured, greyish yellow, even yellow, and then assumes a more evident muco-purulent character. As the irritation subsides, this secretion gradually diminishes in quantity and consistence; epithelial cells in diminished number are alone visible, and the mucous membrane gradually and slowly

returns to its normal and healthy condition, regular epithelial layers being formed, as the more superficial are constantly and uniformly thrown off.

In the more severe forms of bronchial catarrh, where a more extended surface of mucous membrane is from the first the seat of morbid action, and where the capillary hyperæmia is not confined to the superficial mucous layer, but involves a more expanded series, and injects even the vessels of the sub-mucous tissue, the term bronchitis more usually applies. The several pathological conditions before noticed, are here much aggravated. The mucous membrane is no longer of a bright rose-red colour, but presents a deeper tint, even madder red; in the case before us purple madder. Consequent on this large amount of turgescence of the capillary vessels, (upon which this change of colour depends,) is tumefaction of the entire series of mucous tissues. A swollen turgid state of the mucous membrane is now observed; the effect of this is a diminution in the calibre of the air tubes,—a coarctation of them,—a lessened diameter. An increased frequency in the respiratory movements now compensates, or is an effort to compensate, for the diminished capacity of the air-tubes; and we notice in the severer forms of the disease, a gasping effort during inspiration, attended by very distinct wheezing sounds on expiration; these are distinctly heard, even without the aid of the stethoscope.

Now all these conditions were present in the case under consideration; and the physical signs recorded in the case book are very expressive of the conditions just explained. There is no respiratory vesicular murmur to be heard, the only sound at first is a sonorous rhonchus, either accompanied or followed by a variety of irregular murmurs, sometimes simulating the gentle cooing of a pigeon, at others whistling and wheezing. The lessened diameter of the air-tubes from the tumefaction of the sub-mucous tissue, is the cause of these sounds. As secretion becomes established, the turgescence of the membrane is relieved, but the air passing and re-passing over and through the tenacious matters in the tubes, produces the bubbling sound, heard so soon as secretion is accomplished, and to which the term mucous rhonchus or mucous gurgling is applied. This sound differs somewhat, according as it emanates from the larger or smaller tubes, and the study of that distinction is of much practical consequence. The mucous gurgling of the small tubes was very palpably present in this case, and you had an opportunity of hearing its peculiarity. When the catarrhal irritation extends to the smaller tubes, a similar series of changes takes place; the secretion at first scanty and thin, accompanied by frequent, urgent, and almost suffocative cough, becomes more abundant, opaque—a yellowish mucus, tenacious and frothy,—and in urgent cases, assumes the qualities of a muco-purulent fluid, in some cases possessing an almost cream-like consistence. This, as convalescence proceeds, becomes again thinner—more fluid, till in the stage of chronic bronchitis it has become a perfectly white frothy fluid, colourless, and oftentimes extremely abundant.

There is yet one other pathological condition in the severe and more acute forms of bronchitis, and of which we have some evidence in this case, which must not be omitted, and that is the presence of plastic exudation; it is also known as fibrinous exudation, and is the inflammatory exudation of Vogel and other modern pathologists. The mucous membrane is as capable of generating this product of inflammatory action as other tissues, although it is certainly not so frequently observed as in the serous and cellular series. It would appear to be dependent on the amount of pre-existing capillary hyperæmia, the intensity of which, instead of generating granular cells, which are rapidly converted into pus-globules, and thus forming a true muco-purulent secretion, is attended by the exudation of a plastic lymph, which fills the smaller tubes and takes their form; and if the disease be fatal at this stage, this coagulated matter may be drawn out from the smaller branches, and in this case you witnessed its tenacity to be sufficient to allow it to be drawn out. In croup this exudative product extends over a large portion of the tubes, and explains the peculiarity of the stringy shreds expectorated in this disease. In the adult, if life be prolonged, this inflammatory exudation soon becomes purulent, pus-globules being very soon generated in it. This change facilitates its excretion, rendering it more fluid, less tenacious, and consequently more easily expectorated.

There can be no doubt, notwithstanding the imperfect history of this case antecedent to admission, that pulmonary catarrh had existed for some time, perhaps in a chronic form, and that in all probability the patient had experienced repeated attacks for some winters past. The enlarged condition of the heart strongly favours this view, for derangement in the structural condition of this organ is one of the most frequent causes of the perpetuation of chronic catarrhal affections of the pulmonary organs. A catarrhal predisposition in the bronchial mucous membrane, and heart-disease, tend to mutual aggravation. The catarrhal condition gives rise to frequent cough, often paroxysmal and suffocative; venous turgescence results. The violent expiratory efforts of coughing convey an impulse back on the right ventricle; in consequence of the disturbance the current of blood suffers from the circulation from the right side of the heart into the lungs being impeded, dilatation of this cavity follows, with a corresponding increase in the general mass of the organ. Increase of volume produces increase of power, and causes the blood to circulate in the pulmonary tissues with a force proportionate to the augmented volume. A condition of passive hyperæmia is perpetually present, which promotes, if it does not originate, the susceptibility to catarrhal irritation. With such predisposing causes it is not to be wondered that acute bronchitis should supervene, and should run a rapid and fatal course. Inflammatory exudation forms in the smaller bronchi; blood imperfectly oxygenated circulates through the left side of the heart, and reaches the great central organs of the frame; its action on the brain is first to induce torpid senses, the countenance becomes livid and purple, the surface becomes œdematous, the dyspnœa becomes more and more urgent, coma supervenes, and death then closes the painful and distressing struggle. The existence of emphysema

on the inferior margins, and on the surface of the lobes, must be taken as collateral proofs of the existence of some long-standing affection of the pulmonary organs, attended most probably by violent expiratory efforts, as in coughing; but the subject and pathological conditions of emphysema I propose to treat of on some other occasion.

THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(*Fourth Series of Experimental Researches.*)

By William Addison, M.D., F.R.S., Malvern.

(*Continued from page* 93.)

VII. The Process of Nutrition, or the Reciprocal Action between the Blood and the Solid Textures.

The growth and preservation of all parts of the human body, and the renewal of its textures and secretions, whether healthy or diseased, depend upon a reciprocal action between the blood and the solid parts, termed the process of nutrition, in which certain elements or forms of matter withdrawn from the circulating current, become portions of the fixed solid. If the newly withdrawn matter assume the form of the pre-existing elements of the solid, and the quality of the pre-existing secretion, the process is said to be *normal* or healthy; but if the elements of the solid be changed, or the quality of its secretion altered, in consequence of any unusual change or unconformable transformation which the new matter undergoes, then the process is said to be *abnormal* or unhealthy.

If the circulation of the blood be observed with the microscope, in the nutrient vessels of a transparent texture in the living animal, without any previous rude handling or irritation, the stream is seen rapid and uniform, and it is impossible, from the rapidity of the current, to discriminate its cellular or corpuscular elements, except that here and there colourless cells are seen clinging to the walls of the vessels, slowly gliding along in close contact with them. If the part under observation be irritated, the regularity of the stream is immediately disturbed in a very remarkable manner, and, as if in consequence thereof, colourless cells, in increasing numbers, are observed separating themselves from the red current, and becoming fixed to the walls of the vessels. Soon afterwards, a clear colourless material appears between the stream of red blood and the solid texture, in which the colourless cells seem to be embedded; so that the irritating cause, of whatsoever nature it may be, is productive of an actual and visible separation between the colourless and the red elements of the blood, which is seen to take place within the vessels, the red flowing onward, sometimes with the utmost rapidity, whilst the colourless remain stationary, and form a new interior coating to the vessels (the protoplasma.) We are precluded from making this direct satisfactory and conclusive observation in the human body, because there is no accessible part sufficiently thin and transparent for the purpose; but we have cogent reasons in the analogies of life and function—in the composition of the textures and the blood—for concluding, that in man, analogous or similar irritants are followed by similar results. This conclusion, drawn from analogy, is substantially corroborated by the fact, that in the human body, colourless cells greatly abound in the blood drawn from vessels that are experiencing any irritative or inflammatory action.

But the real nature or meaning of the phenomenon, thus seen in the living vessels of animal structure, and presumed from strong analogies to exist in the human body also, must be interpreted by the result or product—and this clearly proves it to be a phenomenon of nutrition, for the irritated animal textures become thicker, and new layers and new matter appears;—so in the human body where textures are becoming thickened, where new products and new results are appearing,—in pimples, boils and vesications,—in the skin in scarlet fever and erysipelas,—colourless cells are exceedingly abundant in the nutrient vessels, sometimes equalling in amount the number of the red cells.

Hence, therefore, it appears, from proofs accumulated on all sides, that the separation of the colourless cells and protoplasma or lymph of blood, from the red cells, and their distribution in a stationary form over the interior surface of the nutrient vessels are phenomena of nutrition; and it would farther appear from the cellular or corpuscular nature of pus, and from the ready healing by pressure of wounds discharging pus, that if the colourless elements withdrawn from the blood fail to undergo a conformable metamorphosis, or the cells to deliver up their contents, they change the character of the walls of the vessels, alter the anatomical type of the texture, and subsequently appear in the discharges or secretions,—in which case *the whole thickness* and the whole of the matter in the walls of the vessels experience a progressive alteration from within, there being no membranous septum or *structureless membrane* under these altered conditions, standing as a barrier to the retrograde morphology.

The process of nutrition here described from observation and experiment, comprises three intelligible and visible stages:—*First*, the separation of the colourless cells and protoplasma of the blood from the red current; *secondly*, the metamorphoses of these colourless elements in their progress through the walls of the vessels; and *thirdly*, the ultimate product which constitutes the permanent form or textural type. The first stage takes place within the vessels, along their interior boundary; the second takes place in, and gives the form of, the elements of the walls of the vessels; and the third, or ultimate product, appears at the outer

margin and is in fact an extension, of the vascular wall.

These stages of nutrition will be more readily comprehended by referring to the wood engraving, which represents *one half* of the diameter of a small blood-vessel in the transparent membrane of a human embryo, at two months, that is to say, in a texture in a state of rapid growth or active metamorphosis. It was copied from the microscope, and is magnified 750 diameters linear. The dark portion, *a*, is one half of the column of red blood lying in the centre of the vessel; the red cells are many of them nucleated, and larger than in the blood of an adult, and lying obscurely amongst them are several colourless-cells—various in dimensions—some very large and filled with a colourless matter mixed with molecules. At *b* is a transparent layer of colourless matter or protoplasma, lying between the column of the red blood and the wall of the vessel;

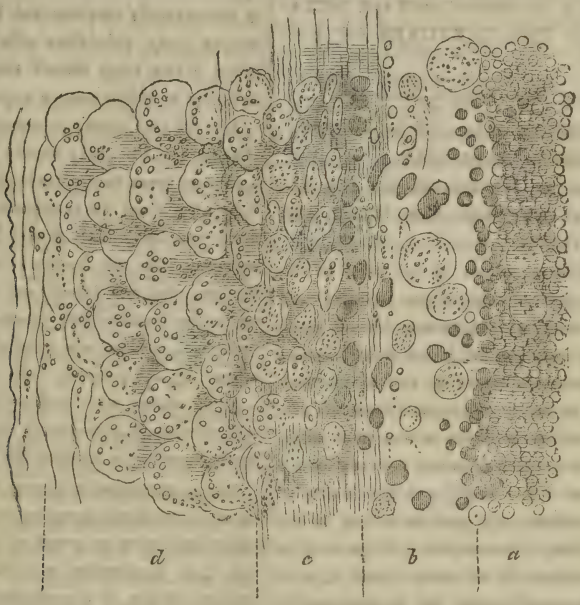


Fig. I.—Half the diameter of a small blood-vessel in the transparent membrane of the human embryo at two months. *a*, column of red blood, *b*, layer of colourless matter, with cells, granules, and molecules, between the red blood and the coherent wall of the vessel. *c*, a texture composed of fibres, cells, and nuclei, forming the wall of the vessel. *d*, the coherent cellular texture forming the membrane.

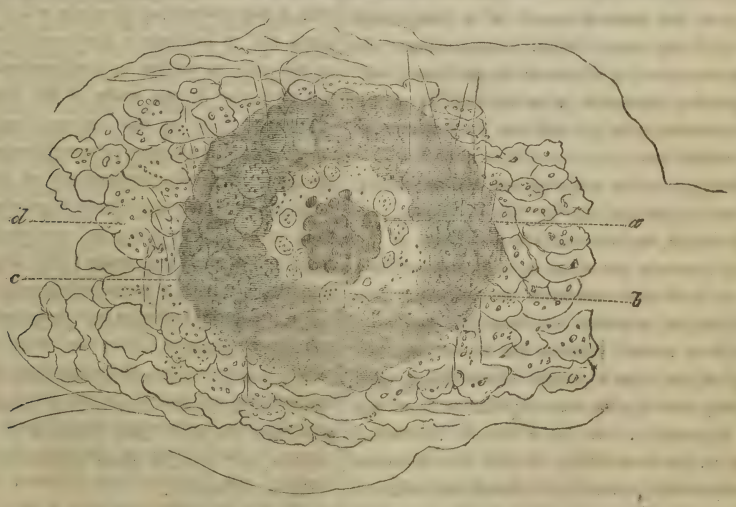


Fig. II.—A section of the same vessel perpendicular tot he axis, shewing the same series, blood, protoplasma, texture, (*πρωτον υφασμα.*) and cellular parenchyma. It appears to me, that the subject of secretion, the growth of the embryo structures, and the phenomena of inflammation, would be more intelligible were we to use terms expressing more accurately *the stages of nutrition*, as revealed by the microscope:—(*a*) blood—(*b*) protoplasma—(*c*) prot-uphasma—(*d*) parencehyma. I well remember the late Dr. George Pearson, five and twenty years ago, insisting upon the distinctions between *coagulable* and *coagulated* lymph.

in it are seen several colourless cells of various sizes, filled with molecules, also smaller granular particles; and numerous isolated molecules. At *c* is the wall or coat of the vessel, (the *prot-uphasma* or first texture,) composed of numerous colourless cells or nuclei embedded in a mass of nascent fibrils, which have, in this example, hardly more coherency than the fibrils of a tough mucus. Granular particles and molecules are seen within these colourless cells or nuclei, and the fibrils pass around and between them. Numerous red cells of irregular shape are seen mingled with the colourless elements,—cells, nuclei, and fibrils,— of the vessel's wall, or coat; but these have all the appearance of being accidental and due to the manipulation necessary to render the texture a microscopic object. At *d* is a portion of the transparent cellular membrane itself—the *parenchyma;* it is evidently an extension or expansion of the wall of the vessel, and no unalterable barrier exists to separate it from the *protoplasma—every element is in progress of change.*

If a section of this vessel were made across it, perpendicular to its axis, we should have a column of blood in the centre *(a)*, consisting of red and colourless incoherent cells, suspended in the blood-fluid; next to it will be a layer of colourless lymph or protoplasma (*b*), consisting of a viscous matter, mixed with molecules and colourless cells; next to that is the proper coat of the vessel (*c*), the first texture varying with the morphology, and consisting in this case of delicate fibres, intermingled with molecules, granules, and colourless cells or nuclei; and lastly, as an extension of the vascular wall, the proper texture or parenchyma (*d*),—this texture shewing what the morphology has been, and the existing vascular wall indicating what it is or will be. A similar section of a vessel that has been irritated in the frog's foot, would exhibit the same thing. Hence, then, the conclusion stated in the *"First Series of Researches,"* p. 30, respecting the analogies between active growth and inflammation, is fully borne out by these subsequent investigations.

These things, let it be observed, are not matters of surmise and conjecture, but of demonstration, and cannot, therefore, be set aside because they do not square with received and hypothetical notions. It is very easy to throw discredit upon microscopical facts and conclusions by a flourish of the critical pen, and a flippant style of remark, little suited to the occasion; but Nature marches on, although the critics write, and is ever ready with intelligible answers to those who faithfully interrogate. A florid appeal to existing sympathies may be for a time successful. Warm-hearted spirits contend stoutly for their convictions; and settled opinions are difficult out-works to carry, though Nature herself be battering at the walls. But those who, in the ardour of their defence, merely uphold their own opinions, when truth and science are rolling onward in new directions, must find themselves at last protecting shadows in the rear.

In bringing my observations for verification to the test of the microscope, I would fain remark, that the observer should bear in mind the minuteness and delicacy of those portions of structure that can alone be submitted to high microscopic power, and the unavoidable disturbances that necessarily ensue when it is requisite to take very thin sections, and therefore that decisions *pro* or *con* should be based not so much upon the isolated results of one or two hasty trials, but rather on the tenor of the indications derived from a greater number.

In any departure from the law of the nutrition of a texture,—from the law of the morphology,—it must be a very difficult question to determine where the first unconformable step commences, whether in the blood *a*,—in the lymph or protoplasma *b*,—in the wall of the vessel *c*,—or in the texture *d*? It is very common to read about diseases of the blood, yet all must be dark and unsatisfactory to any one that has observed the relations between the blood and the textures by means of adequate power through the microscope; and certain it is, that no *practical* conclusions can be established respecting health and disease until the stages of nutrition, the reciprocal actions between the blood and the solid textures, be established. At present the notorious fact of red blood, administering to the rapid increase or deposition of colourless textures, lymph, mucus, and pus, remains, in respect of any well-directed scientific investigation, a *glaring instance* of theory, hypothesis, and conjecture. Critical physiologists seem afraid of using their eyes, though they battle boldly with assertions.

VIII. Inflammation.

When the growth and nutrition of a texture of any kind, whether animal or vegetable, is *normal*, its elements are reproduced or multiplied, its form evolved, and its characteristic qualities and secretions established by a metamorphosis of the nutritive elements, supplied from without, in accordance with the law originally in force in the primary conformation of the parent organism from which it sprung. Every change,—every metamorphosis,—every action,—and every product, yielding or conforming to the law, is an integral element of the complex phenomenon termed health; and every action or product deviating from it, is an element of disease.

It is not my intention now to enter upon the multiplied details of inflammation or inflammatory products; hereafter we shall have occasion to return to the subject, and examine more particularly the nature of its manifold results.

We have seen that any irritation of a vascular texture, is productive of an increased amount of nutritive matter, which is deposited from the circulating blood, upon the walls or inner boundary of the vessels.

The *increased* amount of matter so deposited is a deviation from *the law* of the texture, and therefore a phenomenon of disease; but the sensible or visible effects upon the texture depend upon the times, stages, and forms, of the subsequent morphology, which may conform to the law of the texture, or deviate from it. For example—the *fibrous textures* are not secreting textures; they do not evolve a viscid mucus mixed with cells; this is not the law of *their* nutrition. These textures are therefore on this account called *serous textures*. But there are other textures that do evolve a viscid mucus, mixed with numerous colourless cells, and these are therefore termed *mucous textures*. Now, an unusual amount of nutritive matter, deposited upon the walls of the blood-vessels of a fibrous texture, *and a conformable morphology*, necessarily give rise to an increased amount of the elements of the texture, which becomes thickened by abnormal fibres; and if adhesions are contracted between contiguous surfaces, it is by fibres; and the serous fluid which naturally lubricates the texture, is increased in quantity. On the other hand, an unusual amount of nutritive matter, deposited upon the walls of the nutrient vessels of a mucous texture, *and a conformable morphology*, give rise to an increased quantity of mucus, mixed with a larger number of colourless cells. In either case, an unconformable morphology would produce different forms and qualities—fibrous forms, for instance, upon the mucous textures, and corpuscular forms upon the fibrous textures.

"Inflammation," says a recent and talented author "must needs occupy a large share of the attention both of the surgeon and the physician; it is continually the object of his treatment and watchful care. It affects all parts that are furnished with blood-vessels; and it affects different parts very variously."—"A great majority of all the diseases to which the human frame is liable, begin with inflammation or end in inflammation, or are accompanied by inflammation during some part of their course, or resemble inflammation in their symptoms. Most of the organic changes of different parts of the body recognize inflammation as their cause, or lead to it as their effect; in short, a very large share of the premature extinction of human life in general is more or less attributable to inflammation."—"Again, inflammation is highly interesting, not only in its morbid phenomena and destructive consequences, but in its healing tendencies also. It is by inflammation that wounds are closed, and fractures repaired,—that parts adhere together when their adhesion is essential to the preservation of the individual,—and that foreign and hurtful matters are conveyed safely out of the body. A cut finger, a deep sabre-wound, alike require inflammation to re-unite the divided parts. Does ulceration occur in the stomach or intestines, and threaten to penetrate through them? Inflammation will often anticipate and provide against the danger, glue the threatened membrane to whatever surface may be next it, and so prevent that worst and universal inflammation of the peritoneum which the escape of the contents of the alimentary canal into that serous bag would infallibly occasion. Inflammation, limited in extent, and moderate in degree, becomes conservative by preventing inflammation more severe and more widely-spread, which would be fatal."*

This being the graphic picture of inflammation by a practical physician, the question very naturally arises, what *can* this inflammation be?

In the first place, the answer appears to me to be clear upon this point,—that the inflammation which is conservative,—closes wounds—repairs fractures—has healing tendencies—and preserves the life of the individual,—must be different from the inflammation which produces destructive consequences—morbid phenomena—organic changes—and prematurely extinguishes human life; and therefore, that two very different, nay, opposite and incongruous things, are brought together under the unscientific and silly term of inflammation. The difficulties of the subject obviously arise, not from an oversight of the primary phenomenon, the disturbed circulation of the blood, and the increase of nutritive matter in the vessels of the affected texture, but from an utter neglect of the physiological elements involved, and therefore, necessarily of the conformability or unconformability of the morphology. A nutritive element,—that is, an element of growth, nutrition, or secretion,—which is conformable and therefore healthy in one texture, is unconformable, and therefore an element of disease, in another and different texture. An unusual abundance of colourless corpuscles or cells and an increased mucous secretion in a mucous texture, may pass under the term inflammatory product; but mucus and mucous cells are conformable products, and an unusual amount denotes no more than an increased amount of the elements natural to the texture; whereas, the very same elements in a fibrous or serous texture or in the fluid evolved from it, are *the* proof of an unconformable metamorphosis, because such incoherent forms are not natural to this texture.

If so complex a subject as normal and abnormal nutrition,—of conservative and destructive inflammation—be susceptible of a short definition, it may be said, *that simple healthy inflammation consists of an increased amount of protoplasma with a conformable morphology; and destructive unhealthy inflammation, of an increased amount of protoplasma with an unconformable morphology*. The terms conformable and unconformable, referring to the law which governs and determines the physiological form and function of the texture in health, and which must be known before the nature of

* "Lectures on the Principles and Practice of Physic," (in the *Medical Gazette*,) Dr. Watson.

the diseases can be understood. It is not necessary to this definition of simple healthy inflammation, that *all* the nutritive elements furnished by the blood should undergo a conformable metamorphosis; it is sufficient that they do so within a reasonable time, to the extent of restoring the irritated, wounded, or inflamed texture to its normal state and function.*

Practical medicine is based upon the recognition and appreciation of visible or sensible signs: the physician cannot treat diseases ascertainable only by the microscope; but if this instrument carries our analysis of change of texture into hitherto unknown regions, the medical practitioner must be prepared to accept or reject its testimony *in toto*. There can be no halting between the microscope and the eye,—interpreting one part of physiology and pathology by the vision of nature, and another by the improved vision of art. If the microscope is to be relied on as an analytical means, then not only is every *post-mortem* examination imperfect and the majority useless without it, but we must no longer speak of vessels or ducts secreting. Vessels convey or transmit incoherent corpuscular forms, and are the means of their accumulation; and ducts convey them away *out of the body*. Transformations of matter are effected, or secretions formed, within the cells.

* The phenomena of inflammation, although very multitudinous, may in fact be resolved into the morphology of the contents of individual cells, the conformability or unconformability of the product being dependent upon the normal or physiological type of the elements of the texture, and the form resulting from the last stage of the inflammatory metamorphosis. This is shewn by the phenomena of inflammation in the several textures of the lung,—pleurisy (*fibres,*) bronchitis (*cells and mucus,*) and *pneumonia (a mixed product.)* I would beg to suggest to Mr. Hassall the benefit he would confer on physiology and pathology, by extending his "Microscopical Anatomy," so as to include the elements of the various parenchymata, and the structure of their nutrient vessels in the embryo and in the adult, viewed with a power of 600 or 700. If these were correctly established, the phenomena of scrofulous diseases and inflammation would be rendered easy.

(To be continued.)

CASES AND NOTES FROM HOSPITAL AND PRIVATE PRACTICE.

By C. M. Durrant, M.D.,
Physician to the East Suffolk and Ipswich Hospital.

(*Continued from page* 547, *of last Volume.*)

Case XVII.

CIRCUMSCRIBED EMPYEMA, COMMUNICATING WITH THE BRONCHI: ABSCESS OF THE LUNG: PHYSICAL SIGNS: TREATMENT: RECOVERY.

J. M——, aged 27, a labourer, admitted into the Ipswich Hospital, September 3rd, 1846, under the care of my colleague, Dr. Beck, who being prevented visiting the hospital at the time, the case in part fell under my observation.

He stated, that seven weeks prior to his admission, he was siezed with rigor and pain in the right side, succeeded by slight cough, at first dry, subsequently with some expectoration. He attributed his illness to drinking a pint of very cold water from a spring, when greatly heated by hay making.

The symptoms on admission were thus noted:—Complexion muddy; tongue tolerably clean; bowels regular; urine natural; pulse 80, of good strength; cough not very urgent; expectoration muco-purulent, having a peculiarly unpleasant sickening odour.

Physical signs.—Inspection: Evident bulging of the antero-inferior region of the right side of the chest, from between the third and fourth ribs downwards, the affected portions rising *en masse*; vocal and tussive vibration not particularly noted.—*Percussion:* Complete dulness over the anterior and lower part of the right side in front; normal sonorosity behind; the left side healthy.—*Auscultation:* Total absence of breath-sound over the lower-third of the right lung in front; slightly exaggerated in the antero-superior region of the same side; fistulous breathing audible between the fourth and fifth ribs; respiration natural over the back; no abnormal rhonchi; resonance of voice and cough unaffected; left lung healthy.

These phenomena continued for about a week, with but little variation, the pulse remaining at 80, soft, and of moderate strength; tongue clean; appetite excellent, and bowels regular. At this period the patient became suddenly worse; he had a rigor; the skin was hot; the cough greatly increased; expectoration purulent, the odour from which was now scarcely bearable; he had nocturnal perspirations, and evidently emaciated; the pulse, however, remained steadily at 80, of fair tone, and the appetite continued tolerably good. There was occasional vomiting, which was justly attributed to the horrible fœtor of the expectoration. On examining the chest, the respiratory murmur was now feebly audible over portions of the affected region, on the right side in front, in which it had hitherto been extinct; the fistulous breathing had disappeared, and about two inches to the outer side of the right nipple, and a little above that projection, there now obtained, in addition to a modified amphoric stroke sound, cavernous breathing, loud bronchophony, and slight gurgling, clearly indicative of a pulmonary abscess. The vesicular murmur immediately around this spot was healthy.

Treatment. This consisted of counter-irritation by means of two successive blisters to the side, followed by antimonial pustulation, mercury (Hydrarg. cum Creta,) to affect the gums, the influence of which was prolonged, salines; subsequently the iodide of potassium, creosote internally, and by inhalation; and lastly, quinine and nitric acid, with the syrup of the iodide of iron. The diet, with the exception of the first few days after admission, and the period of the rigor, was "full" throughout—viz., meat daily, with a pint of porter. Under the above treatment the patient rapidly gained flesh and strength, the cough subsided, the expectoration became less, with diminished fœtor, and the progress of the case towards recovery, although slow, was uninterrupted. He was discharged perfectly well, the respirations being fairly audible

over the entire lung, with but comparatively slight falling in of the lower ribs.

Remarks. The phenomena of the preceding case, although full of practical interest, are so clearly developed both by the general symptoms, and also by the physical signs, that it sufficiently elucidates itself; still a passing remark upon one or two points may not be deemed superfluous.

That the patient was correct in ascribing his illness to the draught of cold water taken when heated, there cannot be a question. In our agricultural districts during hot weather this dangerous practice becomes, I believe, not unfrequently a rife cause of internal disease among the labouring classes.

The history of the case, the aspect of the sufferer, the cough, and the peculiar expectoration, at once aroused suspicion of some formidable chest affection. That such existed was most unequivocally revealed by the stethoscopic examination; indeed I do not remember to have seen any case in which the phenomena described in the report were so clearly developed. The bulging of the lower ribs, the circumscribed dulness, with corresponding absence of respiration strictly limited to this spot, at once bespoke the presence of a fluid, enclosed by pleuritic adhesions; while the co-existence of fistulous breathing with the fœtid expectoration, farther indicated that nature had already formed an exit for the discharge of the foreign matter.

The occurrence of abscess in the lung was an unusual feature in this case, its formation was so rapid as to lead to the probable belief that its origin resulted in the introduction into the venous system of purulent matter, followed, as we see in the liver and other parenchymatous organs, by suppurative inflammation. With the exception of a very few days, two most favourable circumstances obtained throughout the progress of the case—viz., the continuance of appetite, and an unvarying steady pulse, seldom above 80, and of moderate strength. When these conditions present, in the absence of tuberculization of the lungs, we shall, I think, for the most part be justified in giving a favourable prognosis.

Cases of this kind require support almost from the onset, steadily having recourse, however, at the same time, to repeated counter-irritation. The creosote in this instance was administered both internally and by inhalation, and as in gangrene of the lung, and other affections in which the expectoration is offensive, with the result of lessening, and finally removing, the fœtor.

Case XVIII.

INFLAMMATION OF THE DIAPHRAGM.

F. S———, aged 34, a tailor, admitted into the Hospital February 18th, 1846. States that he enjoyed good health until about eight years ago, when he had an attack of acute rheumatism. From this he recovered, but has since been the subject of two or three similar seizures. About eight months since, while labouring under a severe attack of rheumatic fever, he was seized with a sudden and severe pain, of a constrictive character, extending completely across the body from one hypochondrium to the other, accompanied by great tenderness on pressure, dyspnœa, cough, palpitation, and, as reported by his wife, considerable delirium. On the occurrence of the pain in the body, the rheumatic pain of the joints became greatly lessened. The patient stated that on different occasions, unconnected with the present attack, he had expectorated large quantities of blood, amounting altogether to between one and two gallons. Of the accuracy of this statement I am sceptical, although the patient adheres most rigidly to the circumstance of the blood being ejected by cough and expectoration, and not by vomiting. On his admission his general appearance was strongly that of advanced phthisis, so much so that I confess that before making an investigation of his case, I was fully prepared to find extensive tuberculous disorganization of the lungs.

His countenance was anxious and exsanguine; eyeballs prominent; tongue coated; total anorexia; bowels sluggish. He complained of a violent sharp burning pain, with great tension and constriction across the lower part of the thorax, extending between the hypochondria and beneath the sternum, and stretching to the loins, and which was greatly aggravated by coughing, sneezing, and deep inspiration. Pressure between the lower ribs, over the epigastrium or hypochondriac regions, and more especially pressure on the abdomen upwards, towards the diaphragm, caused most acute suffering. Respirations short and hurried, and chiefly performed by the intercostal muscles, with slight short dry cough; pulse small, quick, and very weak, and beating irregularly in the right radial artery.

The chest sounded tolerably resonant throughout on percussion; respiratory murmur was audible over both lungs, slightly deficient at the left apex in front; action of the heart weak and irritable, but regular; its sounds unaccompanied by bruit.

Treatment. From the extreme anæmia and general weakness of the patient, neither general nor local depletion appeared admissable. Two grains of calomel with one grain of opium, were given night and morning; a mixture containing an excess of alkali, with spirit of nitrous æther, and small doses of the tincture of colchicum, was directed to be taken three times a day, and a blister, encircling one half the body, was applied to the left side. On the mouth becoming sore, the opium was continued without the calomel, and the subsequent progress of the case to convalescence was uninterrupted. On his discharge from the hospital he was perfectly free from pain, bore firm pressure without complaint, the cough had ceased, but the pulse in the right arm remained irregular, and the respiratory murmur in the apex of the left lung, although more perfect, yet less pronounced than in that of the corresponding side.

I have since heard that he has been the subject of a similar attack, but I have not been able to ascertain the result.

Remarks. While inflammation of the serous covering of the diaphragm, in connection with its contiguous extension over the pleura and liver, is by no means uncommon, inflammation of its musculo-tendinous structure is, I apprehend, decidedly rare. In the foregoing case, the affection was associated with

rheumatism, the extension or repression of which disease is, perhaps, one of its most frequently exciting causes.

The symptoms from the first were well marked, and require no comment. Upon what the permanent irregularity of the pulse in the right radial artery depended, I am not prepared to say, the stethoscope did not indicate either cardiac or arterial disease; it arose, in all probability, from local pressure upon the artery, but in what part of its course this obtained, repeated examination failed to elicit.

In the treatment, in addition to the other remedies, I am disposed to attribute a large share of the benefit derived to the free use of opium; and this leads me to allude briefly to the question lately brought before the Association,—viz., "The treatment of internal inflammation, by opium," an important practical subject, and one which I trust that we shall sooner or later see discussed in the pages of our Journal, by not a few only of its many talented members. Without entering upon the theory of the action which opium exerts upon healthy and diseased organs, I can most fully assent to the opinions which have been recently expressed by Drs. Chambers and Ranking, in reference to its utility in the treatment of many cases of acute internal inflammation. The power of allaying pain, subduing nervous excitability, and thereby reducing the irritability of the heart's action, peculiarly belongs to this drug; and however difficult or impossible it may be to instance, by writing, those particular conditions in which its adoption is so generally followed by benefit, still how vividly will the reflecting physician, unshackled by hypothetical notions, revert to the satisfactory results which in his hands have attended its use.

In the selection of the cases most requiring the opium treatment, as also the precise period at which this medicine is called for, (and this is all important,) medical tact and observant experience can alone direct. A volume upon the subject would, in many instances, utterly fail to indicate the peculiar circumstances requiring opium, but in which to give it is recovery to the patient,—to withhold it is probable destruction; and who cannot call to mind the look of gratitude beaming in the countenance of the sufferer relieved, if not rendered out of danger, by the timely and judicious exhibition of this valuable drug. Independently of those diseases in the treatment of which opium is commonly prescribed, as delirium tremens and some other nervous affections, there exist others, in which at one period or other of their course, the exhibition of opiates is attended with the happiest results.

In the second stage of pneunomia, if the cough be constant and harassing, the expectoration scanty, and the countenance anxious, with an exalted state of nervous sensibility, full doses of opium at bed-time often act like a charm. In pleurisy, prior to effusion, the same medicine administered at night, giving mercury *per se* during the day, is equally valuable. If effusion obtain, the balance of the circulation is often so much interfered with, that the propriety of opium, in these cases, becomes questionable. In rheumatism, the best effects result from opiates; but in this disease, as in pleurisy, I believe that more benefit will be derived from administering opium in full doses at night, with mercury during the day, instead of the more common practice of combining the two remedies. In croup also, in lymphatic children, after the urgency of the symptoms have abated, opium to prevent spasm is often imperatively called for. In peritonitis, enteritis, diarrhœa, and dysentery, opium judiciously used is invaluable.

The forms which I myself prefer are the crude opium and the muriate of morphia.

In reference to the constipating effects of this drug upon the bowels, I do not regard it as any reason for withholding its use. In enteritis and peritonitis, it becomes often of paramount importance, while allaying pain, to ensure quietude in the intestinal tract; and not unfrequently shall we find obstinate constipation attended with, and perhaps produced by, spasm, effectually relieved by the free administration of opium. Within the last few weeks, I have witnessed the most decidedly beneficial result obtain from the exhibition of opium, in strangulated irreducible hernia, for the relief of which, neither the patient (a female, aged 64,) nor her friends, would sanction an operation. After all other measures had been adopted, by the surgeon in attendance, without avail, and repeated stercoraceous vomiting taking place, a grain of solid opium was administered every two hours, with the effect of not only allaying the vomiting, but also (after half a drachm had been taken,) of inducing free and repeated evacuation of the bowels, which function had not previously been performed for fourteen days. The patient, although relieved from the consequences of the hernia, ultimately sank from exhaustion, the friends pertinaciously refusing a *post-mortem* examination.

In thus briefly advocating the powers of opium in the treatment of internal inflammation, I must again repeat, that it is clinical observation alone that will suffice to demonstrate, in many instances, the particular time and circumstances by which its exhibition must be regulated. When calculated to benefit, the relief which it affords is often immense, while on the contrary, if given under disadvantageous conditions, its injurious effects may be irreparable.

(*To be continued.*)

A CASE OF DYSMENORRHŒA IN WHICH THE TINCTURE OF CANNABIS INDICA WAS EMPLOYED, WITH SOME OBSERVATIONS UPON THAT DRUG.

By Benjamin Barrow, Fellow of the Royal Medico-Chirurgical Society, of London.

In offering the following observations to the perusal of the profession, it must not be supposed that I consider the *usual* effects of the hemp to be those which came under my notice in the case in which I employed it, but simply that they are *some* of those which *may* occur and cause much alarm not only to the patient and friends but also to the medical attendant. It is

my desire in giving these details to put those practitioners who may not have employed the cannabis upon their guard as to its administration, for my own part I shall not again give it in any case wherein the uterus is at fault, knowing as I now do what *may happen*, and as I shall presently show, how long the uncomfortable and painful sensations about that organ may continue after its exhibition.

The Cannabis Indica, being one of those drugs, the use of which has been, I believe, very limited, and of which little is known, it may be interesting to some and useful to others of our profession to have a few particulars of the plant and preparation laid before them, as also a brief outline of the experience of those who have employed it as a medicinal remedy. I find that Dr. Pereira, to whose able work on Materia Medica I may refer for full information, represents the Cannabis Indica as possessing no specific qualities different from the Cannabis sativa, which is, as of course all know, the common hemp. Some botanists have, however, stated that there are certain slight differences in the growth and flowering of the plants.* The ordinary dose of the tincture prepared from these plants appears to be from ten to twenty drops; in some cases even as much as a drachm has been given, and without producing effects of any kind. Dr. Pereira, as well as others, has experimented with the drug, and witnessed various effects in different individuals, but none exactly similar to those which were present in the case I shall directly relate. The Indian hemp is mentioned as causing a very agreeable kind of delirium, augmented appetite, venereal excitement, and impaired volition, followed by insensibility, during which the patient retains any position in which he may be placed; its effects, therefore, simulate catalepsy. Dr. W. B. O'Shaughnessy, of Calcutta, has written upon this subject, and his observations upon these preparations may be consulted with advantage. He has described their effects on the animal system in health, and their utility in the treatment of tetanus and other convulsive disorders. Dr. J. Clendinning gives a favourable account of the drug, and says "its exhibition was followed with remarkably few exceptions by manifest effects as a soporific or hypnotic in conciliating sleep, as an anodyne in lulling irritation, as an antispasmodic in checking cough and cramp, and as a nervine stimulant in removing languor and anxiety. These effects were observed in both acute and chronic affections, and in patients of all ages and both sexes. It had also the advantage of not producing the injurious effects of opium. The following is a faithful record of the circumstances which attended the case which came lately under my care:—

A married lady, twenty-six years of age, of a thin spare habit, of a naturally feeble constitution, and who had suffered for some years from dysmenorrhœa, the pain at these periods being of a more than ordinary severe character, requested my attendance in consequence of the extreme suffering with which the last period was ushered in. On previous occasions, I had only been able in any way to alleviate her sufferings, by administering very large quantities of opium or morphine, both of which remedies had been given in every form, but had become so obnoxious to my patient, inducing excessive nausea and vomiting, which frequently lasted for many subsequent days, that I determined to make trial in this instance of the tincture of the Cannabis Indica, my attention having been directed to this remedy and its use recommended, by a much valued and professional friend. I therefore immediately gave five drops for a first dose; in two hours the same quantity was again given, and in three hours five additional; so that in the course of five hours not more than fifteen drops were taken. That this quantity was not exceeded I am certain, since I took the precaution of myself dropping the doses into separate glasses before I quitted the patient. Some ease was experienced after the last dose, and I found my patient tolerably comfortable in the afternoon, but somewhat drowsy, of which I took no particular notice, knowing she had passed but a restless night.

She rose at five o'clock, and went down stairs to dinner at six, at which meal she ate about as usual, and drank one glass of wine. A degree of incoherence of manner and speech was observed by her family during the meal, and almost immediately afterwards she became violently sick and vomited, being at the same time altogether unconscious; the extremities and body became cold, and when I saw her she was perfectly pulseless, the eyes wide open and staring, the pupils somewhat contracted and quite insensible to the strongest light, with strong convulsions of the whole frame, and involuntary twitchings of the muscles, which symptoms remained for a day or two whether awake or asleep. This state of complete insensibility, I might almost say of lifelessness, lasted for about a quarter of an hour. Warm brandy and water, sal volatile, and warmth to the extremities and abdomen had the effect of recalling the circulation, and allaying the other formidable symptoms, but there remained during the whole night a partial state of unconsciousness, as also the other symptoms in a milder degree. The pulse, which varied from 100 to 140 or 150 was extremely feeble, and intermitted from time to time during the following two days.

It is unnecessary to say more of the case, than that the recovery went on progressively under the careful administration of stimulants, although the pains and uncomfortable sensations about the uterus and its appendages continued for a fortnight or longer, which I can only attribute to the medicine, as she had never suffered in a similar way at the termination of any former menstrual period. Warm baths and opium plaster over the hypogastric region, with occasional small doses of hyoscyamus with camphor mixture, tended to relieve these last remaining symptoms.

There are a few observations which it may be useful to make before concluding, but which I shall say in as few words as possible.

The subject of the above case had never suffered at any time of her life from any description of fit or cerebral affection, and her heart, so far as external

* The "Botanical Magazine," Vol. ii, N.S., gives a full description of these plants, by Dr. Hooker.

examination can prove, is free from all disease; so that the failing of the circulation so completely may fairly be attributed to the effects of the cannabis. There is one point particularly worthy of note,—viz., the length of time that the symptoms came on after the administration of the medicine; and I would ask, had she remained quiet in the recumbent position, would the more violent symptoms have been avoided? Upon all those points which appear of interest, and upon the effects which others have observed to follow the exhibition of the cannabis, I am most anxious to learn their experience; and in order to gain such information, I have been induced to lay thus at length before the readers of the *Provincial Journal*, the foregoing case and observations; and feeling, moreover, as I do, most strongly, that it is the duty of every man to give to his professional brethren the advantage of his experience, which important object this Journal is so well calculated to carry out.

Clifton, February, 1847.

CASE OF POPLITEAL ANEURISM TREATED BY COMPRESSION.

By Albert Napper, Esq., Surgeon, Guildford.

Mr. M——k, aged 70 years, a healthy looking man, of tall spare frame and temperate habits, consulted me on the 23rd of August, 1846, for a swelling in the left ham. On examination, I discovered a tumour about the size of a hen's egg, soft and yielding in the flexed position of the limb, but tense and elastic when in an extended state, and projecting considerably beyond the level of the flexor tendons. He had first noticed it about six weeks before, when it was the size of a walnut, and it had gradually increased to the present size. The land which he farms is in some parts very steep, and he attributes the injury to the strain on the limbs in climbing the hills. By careful examination, a distinct pulsation can be felt in the tumour, which becomes flaccid on compressing the femoral artery. No bellows-murmur can be detected, and the pulsation in the lower part of the femoral artery is very weak.

25th. Applied a moderately thick piece of sole leather, previously softened in hot water, over the popliteal space, extending about six inches above and below the joint, and four inches wide, and a similar piece on each side, so as to envelope the limb, with the exception of a narrow space on the upper surface, over which a bandage, sufficiently tight to obtain an exact mould of the inclosed parts. Is not to be confined, but directed to abstain from much exercise.

27th. Removed the leathers, which were well adapted to the joint; but as that covering the tumour did not appear to possess sufficient resistance, it was lined with several layers of lint, steeped in a mixture of white of egg and flour, and over that a thin piece of leather, softened in hot water, and again adjusted as before.

30th. Removed the splints; the lower one is now firm and resisting as a board, and has a complete mould of the tumour.

Sept. 1st. The splints were again removed, and the tumour found in much the same state.

6th. Finding no alteration, I determined on trying the effect of direct pressure on the tumour; I therefore placed upon the swelling several layers of lint, steeped in white of egg and flour, to the thickness of half an inch or more, and again applied the splints firmly. Up to this time he has continued to ride on horseback, but is now to be confined to the house.

8th. Tightened the bandage without removing the splints.

12th. Finding, on removal of the splints, that the compress had only had the effect of flattening the tumour, in which the pulsation is still to be felt, I determined on applying a more effectual compress. I therefore placed the half of a wine cork, split longitudinally, just above the depression in the splint, corresponding with the tumour, and covered it with lint steeped as before, in white of egg and flour, so as to obtain a direct pressure on the artery, immediately above the sack. The splints were then adjusted as before, but with the addition of three or four broad tapes with buckles, firmly stitched to the lower splint to prevent any displacement, and which I afterwards found to be much more effectual than the bandage alone. Assuming that, from the pressure already applied for the space of seventeen days, during which time the patient had not been restricted from exercise of the limb, the collateral circulation was somewhat established, I applied the splints by means of the tape straps, sufficiently tight to nearly or quite obstruct the circulation through the sac, but before leaving my patient, who resides at some distance from me, I gave instructions to his wife as to the management, in the case of the limb assuming a state of venous turgescence. He is now directed to keep the recumbent posture.

15th. Appears to be doing well. His wife informed me that within an hour after I left him on the 12th, the leg became exceedingly turgid and of a deep purple hue, accompanied with numbness and loss of temperature, but through her judicious treatment, this was subdued by slightly loosening the lower strap, and applying friction with warm fomentations. From this time no alteration was made except an occasional tightening of the straps, until—

Oct. 3rd. Removed the splints; tumour much diminished and flaccid, but no pulsation to be detected; a small vessel is felt pulsating over its surface. The ends of the cork, from being left too sharp, have produced slight excoriations of the skin. This was rectified, and the compress adjusted as before.

11th. Removed the splints; tumour much diminished; compress re-applied as before.

15th. The cork compress was now replaced with one made of tow wrapped in lint; the tumour scarcely to be felt.

18th. Continues to improve; he now walks out every day.

Nov. 27th. The leather splints producing but little inconvenience, have been worn to the present time, though I believe for the last month they have been quite unnecessary. They are now removed, and a simple bandage applied. The artery can be felt as a hard cord in the recent situation of the tumour, and the

small vessel above alluded to, pulsating immediately over it.

January 22nd, 1847. On visiting Mr. M—— to day, I found him as well as before the occurrence of the aneurism. A distinct pulsation can be felt in the anterior and posterior tibial arteries.

The difficulty experienced in all the cases hitherto reported, of keeping the compress on the femoral artery, and the pain produced by its pressure on the saphenus and branches of the crural nerves, induced me to try the above method of compressing the artery on the popliteal space; but had I felt disposed to treat my patient by means of any of the ingenious contrivances invented for the purpose, I should probably have failed, owing to the distance (seven miles,) at which he resides from me. The complete success of the above simple method of treatment I trust will be a sufficient apology for my offering it to the notice of the profession, and though it may not be applicable in every case, I believe in the majority of cases seen in an early stage it will be found successful. I think an improvement might be made by removing a portion of the splint, corresponding with the seat of pressure, just large enough to admit the pad of a tourniquet, by which means any amount of pressure might be applied without a possibility of the least displacement of the compress, and with a little contrivance, aneurisms in other situations might be similarly treated.

It is worthy of remark, that during the whole course of treatment the patient suffered *no pain*, though I now believe the pressure was kept up considerably longer than was necessary. He also during the whole time *walked* every morning into an adjoining room, and back in the evening, and was allowed to vary his position in bed as he felt disposed.

Guildford, January 27, 1847.

CASE OF SUPPLEMENTARY SPLEEN, CAUSING DEATH FROM THE PATIENT BEING PLACED IN THE SUPINE POSITION, IN CONSEQUENCE OF A FRACTURED THIGH.

By W. H. Bainbrigge, Esq., F.R.C.S., Surgeon to the Northern Hospital, Liverpool.

May 5th, 1845, James Hughes, aged 53, a groom, of temperate habits, was admitted into the Northern Hospital under my care. While exercising a horse, a short time before his admission, the animal reared, and fell upon him; he was immediately brought to the hospital, and found to have a simple fracture of the left thigh, which was put up in the usual way with the long splint. He went on very well for two or three days, when he complained much of pain in the back, which was relieved by placing a pillow under it. In the evening he complained of swelling of the abdomen, which was tympanitic, but free from pain. The bowels had not been opened since the accident. A turpentine injection, a dose of castor oil, and turpentine fomentations to the abdomen were prescribed. The enema returned without bringing away any fæcal matter, but there was a free discharge of flatus.

Next day, May 8th, the tympanitis continued; he had vomiting and occasional hiccough; no pain or tenderness of the abdomen; countenance depressed; pulse not much accelerated, and of good strength; urine rather diminished in quantity, but not considerably so; tongue moist; thirst. A large quantity of warm water with some turpentine was thrown into the colon with the long tube; it immediately returned without any fæcal matter, but occasioned an escape of flatus, which afforded some relief. Afterwards five grains of calomel were given, and repeated in three hours; this allayed the vomiting for a time, but did not produce any evacuation. He says that several years previous he was affected in a similar way, and that the constipation continued for five or six days, the greater part of which time he was obliged to lie on his back in consequence of an injury. A dose of castor oil and turpentine was given, but immediately rejected by the stomach. He continued to get worse; the vomiting and hiccough were incessant. Expressing a desire to be placed on the night-chair, his wish was acceded to, but nothing was passed.

On the morning of the 10th the long tube was again used, it passed up freely, and a very large injection of warm water and turpentine was given. On the injection returning there was a pretty free discharge of dark-coloured fluid fæces. The vomiting and hiccough continued, but were temporarily relieved by æther and opium, and the bowels acted pretty freely several times. He became gradually worse, and died on Monday, 12th. For the last two days it was requisite to draw off his urine, which was abundantly secreted. The vomiting, hiccough, and tympanitis, continued to the last, but without pain or tenderness of the abdomen.

Autopsy. Intestines generally distended; no traces of peritonitis. On pushing the small bowels on one side, a tumour about the size of a duck's egg was observed lying on the pelvis, and connected with the great omentum, which it dragged down, and formed a band of cord which passed in front of the large bowel at the commencement of the rectum, pressing it against the posterior part of the brim of the pelvis. When on his back the tumour would necessarily fall into the cavity of the pelvis, and cause the cord of the omentum above described to exert so much pressure on the bowel as to impede its functions. On further examination the tumour was found to be a supplementary spleen, enclosed between the layers of the omentum, and receiving for its supply one of the divisions of the splenic artery, which in fact divided into two branches, one to each spleen.

The above case is chiefly interesting in a physiological point of view. Pathologically regarded, (beyond the circumstance of death being caused by the pressure of the contracted portion of the great omentum,) it possesses no feature of practical interest, as there were no means of ascertaining that this pressure was caused by the position of the patient, and that of the supplementary spleen. It is, however, interesting, as being one fact more added to the list of anomalous cases of the kind on record. Singularly enough accidental change of posture on the part of the patient would have removed the mechanical obstruction, and saved

life, as it seems to have done in the previous attack of constipation. The existence of accessory spleens is a well-known physiological fact; their occurrence, however, is very rare; their varieties are numerous, and they are usually found in the lower extremity of the organ, not far from the fissure either in the gastro-splenic ligament, or, as was the case in the present instance, in the great omentum. Their form is commonly round. That found in this case was in shape precisely like that of the spleen itself, and that it was identical in structure will appear from the following statement, for which I am indebted to Dr. Inman, who was so kind as to examine it microscopically for me:—

"The spleen you exhibited last night possesses conclusive proofs of identity in the peculiar disposition of the arteries and veins in its tissue, in its well-marked fibrous and trabecular character, and the remains of the Malpighian corpuscles, in the existence of a few distinct granules with the remains of others, and in the complete absence of anything like a microscopic cell-structure."

DISSECTION OF THE EARS OF A DEAF AND DUMB PATIENT.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I beg to enclose the notes of a dissection of the ears of a deaf and dumb patient, which were kindly sent to me by Mr. Crosse, to whom I beg to return my sincere thanks for the opportunity he has afforded me of investigating the pathology of the ear; for I feel confident that the only way of throwing light upon the nature of deafness, is to make extended researches into the various morbid changes which take place in the organ of hearing.

Yours, very faithfully,
JOSEPH TOYNBEE.

12, Argyll Place, London,
Feb. 19, 1847.

NOTES OF THE CASE BY MR. CROSSE.

"The patient was 47 years old, or thereabouts, when he died; he was deaf and therefore dumb from birth; his intellect was good enough for him to support himself for many years as a *weaver*, but about fifteen years since he was so reduced as to enter a Union House, and after being there five years showed such a degree of mental derangement that he was placed in a pauper-lunatic asylum, where he remained until he died. He was for a time very maniacal, but subsequently became quiet, and was subject only to occasional attacks, making himself very useful in the asylum in the intervals. I found the cerebrum very vascular on *post-mortem* inspection; an unusual number of vessels, situated chiefly in the medullary substance, discharging their blood on a section being made. The cerebellum was not more vascular than is healthy. I observed no other anormal state of the auditory apparatus. The calvarium I still retain, but shall be glad to send it up, if required, that it may be joined to the rest of the bones of the head, to show the actual size of the brain-box, which indicates that the brain was altogether of rather smaller size than is usual.

"J. G. CROSSE.

"Norwich, February 1, 1847."

DISSECTION.

Right Ear.—The *meatus externus* is full of cerumen of a dark-brown colour.

The *membrana tympani* is of a dull white, and somewhat thicker than natural. The epithelium covering its external surface is denser than usual, and its internal mucous layer thick and soft. The middle proper membrane is also hypertrophied. The cavities of the tympanum and the mastoid cells are completely filled with a secretion of a leaden white colour; it is thick, and in some parts rather viscid. Upon microscopic examination it was observed to consist principally of pus-globules pervaded with granules, characteristic of scrofulous matter.

The mucous membrane of the tympanic cavity is much thicker than natural, it is very soft and contains large tortuous vessels full of dark coloured-blood. The ossicles are quite enveloped, and in a great measure concealed from view, by this thick membrane. The only part of the stapes discernible, is the point where it joins with the incus.

The Eustachian tube is healthy.

The auditory nerve and cochlea appear quite healthy; the fluid in the vestibule and semicircular canals is quite transparent, but the membranous labyrynth is rather thicker than natural, and under the microscope it is seen to contain numerous blood-vessels; the superior semicircular canal is incomplete at its posterior half, and the posterior canal is almost wholly absent.

The *left ear* is in a similar state to the right, excepting that the external meatus is slightly contracted, and the layer of bone separating it from the cavity of the mastoid cells is partially absorbed at the posterior surface of its internal extremity for a space of five or six lines in circumference. The membrane covering this portion of bone, which from its two-fold functions may be called the cutaneo-periosteal membrane, is thick and vascular, and its blood-vessels directly communicate with those of the mucous membrane of the mastoid cells.

I have observed an absorption of the layer of bone between the external meatus and mastoid cells in other instances, and in one dissection the cerumen was found projecting from the cavity of the meatus into the mastoid cells. It is not improbable that the absorption of the bone is caused by the constant pressure of hardened cerumen. The superior semicircular canal was almost wholly wanting. As some dissections of the ear of deaf and dumb patients have been recorded in the *Medico-Chirurgical Transactions*, I have thought it best to lay before the Medico-Chirurgical Society a more detailed account of the condition of the semicircular canals, accompanied by drawings.

Observations. There can be no doubt that the cause of deafness in the patient from whom the ears were taken was the deficiency of the semicircular canals, but it is interesting to notice the thickened condition of the mucous membrane of the tympanic cavity, and the

presence of the purulent matter. From the dissections I have made during the last seven or eight years, which amount at the present time to *nine hundred and eleven*, it is quite apparent that the most frequent cause of deafness is a morbid condition of the tympanic mucous membrane. In some instances there are bands, connecting various parts of the tympanic cavity together, and preventing the natural motions of the ossicula and membrana tympani; in others the cavity is nearly filled by the thickened membrane, and very often there are large quantities of thick viscid matter, which I have every reason to believe may remain for many years if not affected by medicinal agents. A great number of cases of this kind originate in scrofulous inflammation. It is also interesting to remark how rarely the Eustachian tube is affected. I hope ere long to lay before the medical profession the results of some of my later investigations into the nature and treatment of diseases of the ear.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF WILLIAM SANDS COX, ESQ.

By Peter Hinckes Bird, one of the Resident Medical Officers.

(*Continued from page* 100.)

Case XXIII.

LUPUS OF THE FACE.

Thomas Moss, aged 18, tinman, of strumous diathesis, admitted as out-patient at the Queen's Hospital, April 24, 1846, under the care of Mr. William Sands Cox. He states that about three years ago he first observed two or three small pimples on the nostril of the left side of the nose, and one also appeared about the same time on the right side; they burst and formed scabs, and ever since the disease has gradually increased and involved the other parts; has had swelling of the submaxillary and cervical glands for some time; has always enjoyed good health; his parents are both alive and in good health, as are also his brothers and sisters; is rather subject to cough; has spit blood.

Present state.—There is a large patch of ulceration involving both alæ of the nose and septum, which are more or less eaten away, on the left side to a greater extent than on the right; the upper lip is much thickened, and is attacked with this ulceration; he has also a large patch on the left cheek, larger in extent than the bottom of a wine-glass, and also one under the chin, which is partly covered by desquamations of the cuticle. The ulceration is superficial and of a dusky red colour, and secretes a thin pus which dries in some places and forms scabs; the edges of the ulceration are tuberculated and the interior presents several small depressions filled with matter. He has also an abscess of a strumous nature on the back of the hand which has been three years in coming; it discharges a thin flaky pus; he has three glandular swellings of large size situated under the ramus of the jaw on the left side; bowels open; appetite good; tongue clean; complains of slight cough; the ulcerations in the face feel hot; has sometimes a little pain in them, but is generally free from it.

R. Infusi Cascarillæ, oz. iss., ter die. To have the Ung. Zinci on lint applied to the wounds, and a poultice applied to the abscess.

30th. Rather better; the parts do not feel so hot; in no pain. To have the abscess strapped with iodide of lead plaster.

May 5th. The ulceration is not spreading but is rather smaller; there is a slight discharge from some parts of the surface.

16th. Better in all respects; ulceration healing and is certainly less; abscess of the hand smaller; health improved.

22nd. The ulceration is healing and getting into a much smaller compass; it has not broken out in any fresh place; abscess of hand decreasing in size; health good.

27th. Doing well; the ulcerations are getting smaller leaving behind them a livid red cicatrix; the patch on the upper lip is quite healed over.

July 8th. Much the same; the large patch on the cheek is healing rapidly; he had a few days ago a violent attack of hæmoptysis accompanied with much cough; has got thinner lately; sweats much in the morning; flushes at times; pulse 90.

R. Syr. Papav. Alb., Oxym. Scillæ, utrq. oz. ss.; Inf. Rosæ. Co., ad oz. vj. M. Sumat oz. j. ter die.

July 20th. Rather better; cough easier; expectorates a good deal of greenish sputa; had a slight return of the spitting of blood this morning.

30th. Better; cough easier; the patch on the cheek is nearly healed over; that on the nose is quite so; his face is much disfigured by the livid-red cicatrices left behind.

Aug. 27th. He has not made his appearance at the hospital lately, so that we may infer that he is satisfied with his present state.

Lupus belongs to the order tubercula. Rayer describes two varieties of this disease, namely, lupus exedens, and lupus non-exedens, to which M. Biett adds a third,—lupus with hypertrophy. The first of these ulcerates from the surface inwards and leaves deep excavations; the second spreads and ulcerates horizontally; the third rarely ulcerates at all. The two latter are tubercular diseases, and are comparatively rare in this country.

The lupus exedens is a frightful disease, difficult of cure, and when cured leaving behind it more or less deformity. Mr. Plumbe* doubts whether this form is strictly of tubercular origin. It is in fact a chronic cutaneous inflammation of a peculiar character, at once indolent and irritable, but often for a time devoid of pain, of a livid colour, commencing generally in a small portion of the alæ of the nose, or the circumference of the nostril, and speedily tending to phagedenic ulceration; it commonly extends to the

* On Diseases of the Skin, Ed. 3rd.

upper lip, and in this case the ruthless invader had attacked the chin and cheeks.

Of the causes of this disease little is known. Young persons of a scrofulous habit appear more subject to this frightful disease than others. It has, however, been seen to attack persons apparently of the soundest constitution; in this case the patient was without doubt afflicted with tubercular phthisis. It is common in young and previously healthy women from the age of 16 to 30. It is not contagious. This disease is often treated with escharotic applications, such as the chloride of zinc, arsenious acid, &c. &c.; but this case got well under the simple application of the ointment of the oxide of zinc, with a tonic medicine.

This disease has often been most inexcusably confounded with syphilis, and has been aggravated by mercurial salivation. In syphilis there can always be traced, at least a concatenation of secondary symptoms previously developed, and this disease usually commencing from within, the cartilages suffering first; and the ulceration has a specific character. In lupus, on the contrary, the disease appears in persons who have generally enjoyed good health, and in whom neither primary nor secondary symptoms have made their appearance; and it appears as a livid red, not a copper-coloured eruption.

Case XXIV.

PARTIAL LUXATION OF THE ANKLE-JOINT.

Thomas Porton, aged 23, carman, admitted on the evening of August 3rd, 1846. He states that about half an hour previously he slipped off the foot-path into the gutter; he fell with his left foot bent under him; he heard something snap; it caused him great pain, so that he could not walk; he was brought to the Hospital in a car.

On admittance, it was found on examination, that the patient had a partial dislocation of the ankle inwards, the lower head of the tibia being thrown inwards, the internal malleolus forming a more considerable prominence than natural; no fracture of the fibula was discovered; there was considerable swelling in the neighbourhood of the ankle; the outer edge of the foot was slightly everted. The dislocation was easily reduced; after the reduction the pain was lessened; he states that his bowels are rather confined.

Appl. Hirud. viij. partis affectæ. To be followed by a poultice and warm fomentations.

Habt. Mist. Purgant. Pil. cum Calomel., ij. hora somni sumend.

Aug. 4th. Slept indifferently last night on account of the pain; not so much swelling; less pain; tongue coated; pulse 86, strong; bowels open. Continue fomentations.

5th. Slept better last night; appetite indifferent; tongue coated.

6th. Did not sleep so well last night; complains of constant pain from the ankle to the knee.

7th. Feels better in every respect; can move the ankle freely. To have a splint applied, the part to be kept damp by cold lotions.

9th. Better; can walk pretty well.

13th. Discharged cured.

Dislocations of the ankle are generally attended with fracture of the fibula in its lower third; but in this case no fracture was present, he rapidly got well, and was able to walk in less than a fortnight.

WEST NORFOLK AND LYNN HOSPITAL.

COMPLICATED SURGICAL CASES UNDER THE CARE OF CHARLES COTTON, ESQ.

(*Continued from page* 41.)

COMPOUND COMMINUTED FRACTURE OF THE HUMERUS; LESION OF VESSELS: RECOVERY.

Robert Gant, railway labourer, aged 20 years, admitted May 9th, 1846, under the care of Mr. Cotton. Had fallen across the tram-road of a neighbouring railway in the course of construction, and received considerable injury from a loaded truck having passed over his right arm. The accident happened two hours before.

On examination the arm was found much contused and swollen, just above its centre, and ficrid blood oozed freely from an irregularly lacerated wound on the outer side, extending to the bone, which was comminuted and fissured. *No pulsation below the seat of injury.*

Relying upon the age and the robust and healthy appearance of the man, it was determined in consultation to attempt the saving of the limb. The arm was therefore placed by the side upon a soft pillow, guarded with oil-silk. The fragments of bone, (in all *five*,) constituting about three inches of the shaft, were removed through the wound, one portion requiring to be freed from its muscular attachments by the scalpel. A long projecting point from the upper fractured end of the humerus, reaching to the lower, and overlapping it, was allowed to remain. A dossil of lint was applied to the wound, the injured parts ordered to be exposed, to check the oozing of blood, and a moderate warmth to be kept up about the hand and forearm. Low diet.

10th. Temperature of the arm natural.

11th. Bowels have not acted; is feverish, and fearful lest he should lose his arm. Ordered a saline aperient.

12th. Bowels moved twice; irritative fever very high; several vesicles filled with serum around the seat of injury; the hand is comfortably warm, although sensation is imperfect. Liq. Ammon. Acet., dr. ij.; Spir. Æth. Nitr., m. xx.; Vini Antim. Tart., dr. ss.; Tinct. Hyosc., m. x.; ex Aqua, quartis horis.

15th. Considerable phlegmonoid inflammation and swelling of the arm and elbow. A quantity of pus was set at liberty by enlarging the original wound, and making a depending outlet below the elbow. Pergat.

17th. Arm looking better; angry appearance subsiding; discharging freely. Middle diet and porter.

From this time to August 14th the case went on well, requiring but little interference; the wound at the elbow had healed, leaving the joint œdematous and swollen; a sero-purulent discharge continued from the upper wound, which remained open, filled with gelatinous-like granulations, and the skin around red. There is an abundant deposition of bony callus around the

fracture; *no pulse at the wrist.* A long splint was adapted to the arm, and the patient allowed to leave his bed.

18th. Much headache and feverishness; arm uneasy; splint removed. Low diet and house medicine.

19th. Erysipelas supervened, involving the whole arm and shoulder. Limb to be exposed. Potassæ Nitratis, Potassæ Bicarb., utrq., gr. x.; Vini. Antim. Tart. m. xx.; e Mucil. Acaciæ, tertiis vel quartis horis.

24th. Erysipelas subsiding; skin efflorescing; a serous discharge escapes from the wound and two or three small abscesses have formed in the adjoining soft parts.

September 2nd. A pasteboard splint applied; a slight pulsation as if a capillary thrill, thought to be detected at the wrist. A portion of bone has exfoliated.

20th. Again severely attacked with erysipelas, extending over the arm, shoulder, and chest. Exposure. Low diet and nitre mixture as before.

28th. Erysipelas disappearing. A small piece of bone has come away.

October 24th. The force of the collateral circulation quite perceptible at the wrist; can slightly flex the fingers but cannot raise the arm without assistance. There still continues a discharging sinus, from which an additional portion of bone has exfoliated; the surrounding soft parts are becoming more healthy looking, although still œdematous and swollen, particularly about the elbow. Apply light pressure by means of a bandage, and make him an out-patient.

December 26th. Regaining a useful, though somewhat shortened arm; can raise it without assistance; flexion at the elbow still much limited; can grasp pretty strongly with the hand; pulse established at the wrist. Ordered to use the limb, and to be discharged, cured.

(*To be continued.*)

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, MARCH 10, 1847.

The process of inhaling æther for the avoidance of pain during surgical operations, has taken so fast hold of almost every professional man in this country, that it behoves the journalist to look to the subject, and from his focus of information scatter a few useful remarks and cautions on the employment of this new process.

How often has accusation been made by enthusiasts of various descriptions against members of our profession generally, for their incredulity and prejudices in respect to the several delusions with which this age of quackery teems. Yet was censure never less justly applied. The profession are commonly eager enough to embrace any new proposal, and give a laudatory report of its application; too often indeed, at first, without due regard to its effects, or rather perhaps its defects, whenever there is reason and probability in its favour. In the instance of this novel plan for diminishing human suffering, whatever may have been stated on other occasions, sufficient has occurred to redeem the character of the profession, and to prove the readiness of its members to adopt any new suggestion, when supported by facts, and by the slightest colouring of reason.

Whatever hints may previously have been given upon this new application of æthereal inhalation, we are undoubtedly indebted to our Transatlantic brethren for effectively starting it in practice, "*Palmam qui meruit ferat.*" Not he who tamely offers a suggestion, but he who with energy and spirit forces his ideas upon the public, and starts them into practical life and activity, deserves the credit of an invention. In the short space of a few weeks the æthereal inhalation has been tried in our own country in many hundreds of instances; in all parts of the provinces, as well as in the great centres, the metropolis of each division of the kingdom; employed for avoiding pain, not only in the slighter matter of teeth-extraction, but in all cases of the great amputations and other capital operations, and even to strangulated hernia, extirpation of the eyes, ovariotomy, the Cæsarean section, &c.

In a small proportion only of these cases, of whatever description, has the process failed to take effect; and although to a few patients it has proved inconvenient, to none is it reported to have proved fatal, and very little has yet been written upon the cases to which the new measure is inapplicable. Such is the usual course of a novel plan launched upon the wide ocean of practice under popular favour. All appears fair for a prosperous voyage; but it is a voyage of discovery; the quick-sands and dangers are at a distance, and we must wait the navigator's return ere we can learn the whole issue of the undertaking.

The inhaling for the production of narcotic or intoxicating effects is not new, but the extensive adoption of it, in the manner we are considering, may still render a new term convenient, and even necessary. The instrument employed, of whatever construction, has received the appellation of "the Letheon," and from this root is readily to be derived all the terms required. The phenomena which a *letheonized* patient presents, are very similar to those of intoxication, varying in degree from hilarity to half consciousness, complete narcotism, total insensibility to external impressions, failure of pulse, syncope,—may we not add death.* The most striking, if not

* Since the preceding observations were written, a notice of the occurrence of a fatal case, which will be found narrated in another column, has been received;

the peculiar circumstance, is the rapidity with which the effect is produced, the shortness of its duration, and its equally rapid subsidence. The brain is the organ acted upon, and in proportion as external impressions are shut out, internal ideas seem to be generated. A letheonized patient is a sort of Ryp Van Winkle; he dreams away twenty years of his past life in a minute, but with equal surprise, and unlike his predecessor, on awaking to the world again, finds it much as he left it. These psychological phenomena will doubtless furnish a fine study for the physiologist and the metaphysician.

Nothing is more remarkable than what every one who sees half-a-dozen letheonized patients will be sure to witness,—a state of half-consciousness, with eyelids open, a congested countenance, a frightened stare. The patient is sensible of persons present, and talking, and because he is still in a degree sensible, protests against the operation, whilst it is actually being performed; and on the *letheonic* influence subsiding, which it does in two or three minutes, he reports the trial a failure, and waits the operation, which is already completed without his being conscious of it. How are such opposite states of the sensorium compatible? May we conjecture that the succession of ideas is so rapid, that they seem coincident or synchronous, though really successive and alternating?

But we pass to the less speculative part of the subject, as more immediately applicable to our purpose, and we urge our provincial brethren to emulate those of the metropolis in helping to elucidate the use of the Letheon, and particularly to giving us an account of any unfavourable result of the trial,—any cases that may seem unsuited to it. We can scarcely persuade ourselves that the pain naturally attendant upon all mutilating operations upon the human frame, is to be quite annihilated by this discovery, although nothing could be more congenial to the wishes of both the patient and the operator. It will probably turn out that there are cases to which the measure is wholly unsuited, wholly improper. When next "we dip pen" in æthereal fluid, we shall endeavour to write a few cautions, and give a guarded prognosis, as to past or prospective events; meantime, let the incautious Letheonizer beware, remembering that "all is not gold that glitters."

Reviews.

The London and Provincial Medical Directory. 1847. London. pp. 238 and 362.

In an undertaking of this description, especially on the occasion of its first publication, the occurrence of errors is unavoidable. Our provincial friends will, we fear, find these to be numerous and grave, as, judging from the examination we have made, in referring to names well known in our larger towns, and not unknown also in the great metropolis itself, scarcely that care which is requisite would seem to have been employed. Certain of these errors are, no doubt, to be attributed to gentlemen applied to by circulars, having neglected to forward the information asked for; others to the unfortunate scrawls in which too many of our brethren are wont to render themselves unintelligible. But what shall we say for sundry errors of omission and commission, in cases where the information sought for has actually been supplied? Possibly a portion of this may have been thought too trivial for insertion; and had a line of exclusion been drawn, by adherence to which equal justice might have been dealt out to all, in the giving or withholding of titles, appointments, and other claims to consideration, there would have been little cause for complaint; but when we find to some gentlemen ascribed, in addition to genuine qualifications, obscure appointments of which nobody ever heard, or the publication of some brief epistle which nobody ever read,—

"Behold Dalhousie, great God of War!
"Lieutenant-Colonel to the Earl of Mar!"

while from others, all mention of long services as medical officers, whether civil or military, is withheld (due information fsuch services having been supplied,) we are at a loss to devise a palpable excuse for the omissions.

With the question which is attempted to be raised, as to the degree of estimation in which the license of the Apothecaries' Society, and the diploma of the London College of Surgeons, are respectively to be held, we do not feel disposed here to intromit; but we may observe that we find the term 'General Practitioner,' by which it is professedly intended to designate the possessor of the former, sometimes misapplied to those who hold only the diploma of the latter.

But with all this, the publication is one which is calculated to be of great utility. Even in its present imperfect state it affords much information which can nowhere else be met with; and if the errors are duly corrected, which can only be fully and effectually accomplished by individual medical practitioners communicating the requisite information, the edition of another year will prove most acceptable to the entire medical profession.

A Tabular View of the Physical Signs and Diagnosis of the Diseases of the Lungs; with a Synopsis of the Signs which occur in each Disease. By James Turnbull, M.D., Physician to the Liverpool Northern Hospital. London.

We notice this work simply with the view of directing the attention of our readers to a very useful summary of the diagnostic symptoms and characters of diseases of the lungs. The table is folded in a royal octavo

size, and bound up with the accompanying synopsis, with which it admits of convenient consultation and comparison; but it may be also detached and mounted for setting in a frame, and hung up in the consulting room for more ready inspection and reference, as called for. In either way it affords at a glance much valuable information, which it would require the pages of a goodly octavo to set forth.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

January 2nd, 1847.

FREDERICK RYLAND, Esq., in the Chair.

RUPTURE OF THE LEFT VENTRICLE OF THE HEART.

Dr. Fletcher presented a specimen of rupture of the left ventricle of the heart, and read the following letter which he had received from Mr. Savage, of West Bromwich, who had kindly forwarded the specimen to be exhibited to the Society :—

"Dear Sir,—I send you a report of the case connected with the specimen of rupture of the heart I gave you to-day.

"Samuel Allden, of Birmingham, was brought to my surgery about 7 a.m., on Monday last. He was quite dead. It appears he left Birmingham about 6 a.m. of the same day to walk to West Bromwich, to see his son, who resides here. He was overtaken by a coal cart about mid-distance between Birmingham and this place. He asked the man to allow him to ride with him to West Bromwich; he complied with his request. The deceased got into the cart, and sat with the driver on a board put across the cart from side to side. They conversed together on the way cheerfully; the deceased made no complaint whatever. On getting within half a mile of this place the deceased suddenly fell over into the body of the cart, never spoke after, gave one or two gasps, and appeared dead. The man drove at once to my surgery, where on seeing him I found him dead. I have heard from his son that his habits for the last thirty years have been very intemperate.

"*Post-mortem* eight hours after death. He was of nervo-lymphatic temperament; rather full habit of body; no appearance of external injury. On opening the chest and abdomen the cellular tissue was somewhat loaded with fat. We found the pericardium very much distended, and on opening it discovered it to be filled with black blood, both fluid and coagulated, at least amounting to thirty ounces; the left ventricle of the heart we found ruptured; the lungs healthy; no adhesions. The mucous coat of the stomach was inflamed and softened; the liver enlarged, otherwise healthy; the intestines healthy; the bladder and kidneys normal. I did not open the head. There was, in fact, almost the entire absence of any disease except the rupture of the heart."

The heart was enlarged to about half above its natural size, which consisted of a general and equal dilatation of all its cavities, and a corresponding hypertrophy of their parietes. The rupture, situated on the inferior portion of the anterior surface of the left ventricle, consisted of an external laceration about an inch and a half long, extending from about an inch from the septum upwards and outwards, at the inner terminus of which was a round aperture about the size of a large swan quill, which communicated with the interior of the cavity of the left ventricle. In the interior was another laceration or extended ulceration, by which one of the columnæ carneæ had been divided, lined with lymph, and crossing the direction of the external laceration, so as to form a St. Andrew's Cross. The inferior portion of the left ventricle was very much softened. The mitral valves were thickened at their edges; the aortic valves natural. The aorta was dilated, its lining membrane studded with a few patches of atheroma and one of ossific deposit. The apertures of the coronary arteries were dilated, and these arteries themselves much dilated and ossified, particularly the branch of the left coronary running down to the softened and ruptured portion of the left ventricle. The heart was very much coated with fat.

Microscopic examination with a Powell's microscope of Dr. James Russell's, in which he kindly assisted:—In a portion of muscular structure taken from the upper part of the ventricle, where the structure seemed healthy, the muscular fibres were healthy, and the striæ complete; a few fat-globules floating around the edge. In a portion taken from the lower part of the ventricle, where the structure of the ventricle was softened, the fibres of the muscular structure appeared under the microscope smaller than natural, and the striæ in most parts totally absent; in some few portions the striæ were slightly to be perceived when out of focus, so that it is presumed, quite the superficial surface of the muscular fibre was brought into view; there were numerous fat-globules. In a portion taken from the ruptured part of the heart, the muscular fibres were very indistinct, and the striæ, as in the second portion examined, only seen in some parts feebly, and when out of focus; there was abundance of fat-globules.

Dr. Fletcher said that this appeared to be a case of rupture resulting from ossification of the coronary arteries, having caused softening and disorganization of the muscular structure of the left ventricle; the internal laceration must have been caused first, and whether this commenced by laceration or ulceration it is now impossible to determine, but the deposit of lymph shews it to have been of some standing.

The microscopic examination is interesting, as shewing the alteration of the structure of the muscular fibre to correspond with the ruptured and softened portion of the parietes of the left ventricle.

ABNORMAL ATTACHMENT OF THE FUNIS.

Dr. Fletcher exhibited a placenta, membranes, and funis, which had been brought for exhibition to the Society, by Mr. Wright, who gave the following description of the case :—

After delivery the membranes came away separated from the placenta and attached to the cord, and contained

so much clotted blood that it appeared as if the placenta itself was come away, which, on examining the cord and membranes was found not to be the case. On examination per vaginam, the placenta was found within the os uteri, and brought away in the hand, and no trace of attachment of the cord to any part of its surface could be discovered.

OPERATIONS PERFORMED UNDER THE INFLUENCE OF ÆTHER.

By William Philpot Brookes, M.D., M.R.C.S., Surgeon to the General Hospital and Dispensary, Cheltenham.

Since reporting my former case, I have successfully performed the following operations under the effects of the inhalation of æther:—

Ann Weston, aged 69, living at No. 1, Burton Street, had been suffering for the last twelve months with fistula in ano, and had been during the whole of the time confined to her bed. She was of a very nervous debilitated habit, and would not give her consent to the performance of an operation, but upon hearing of my former painless case, she sent for me, and desired to have the operation performed. On examination I found the whole verge of the anus in a state of ulceration, accompanied with great pain. The probe discovered a fistulous sore, extending full four inches into the rectum, the walls of it of some thickness. Having put her in train for performing the operation, it was done in two days afterwards. The patient was laid on her back, with the head elevated, (so as to have no difficulty with the æther,) the buttocks raised, knees drawn up, and held apart. I then passed up my finger, inserted the director, when the inhalation of the æther commenced, (with merely a bladder and elastic tube,) and she was in a complete state of unconsciousness in two minutes. The bistoury was then introduced, and the fistula divided in its whole length without the patient showing the least symptoms of pain or uneasiness. When it was over I asked her if she had quite made up her mind to have the operation performed. She said, "Yes, please go on with it as quickly as possible." When told it was over she uttered great surprise. At this operation the following gentlemen were present:—Drs. Wright, Bagnall, Bree, Smith; Messrs. Eves, Ocrell, Peart, Alix, Tibbs, Rowe, Norman, and Churches, and all agreed and expressed themselves perfectly satisfied with the result.

The next case was that of Ruth Monk, aged 21, who wished to have the last molar tooth extracted under the æthereal influence. She is of full, plethoric, and excitable habit. In one minute and a half she was in a state of unconsciousness from the æther and became quite unmanageable, her face flushed, and she required two persons to hold her. I lanced the gum without any sign of pain, and she recovered her sensibility immediately. As she was very anxious to have the tooth extracted, she again inhaled it, and when under its influence some excitement returned, and on drawing the tooth with the claw she cried out, "Oh!" but on coming to herself stated she had had no pain; and having had nine out before, she could judge of its effects, and said, "I will never loose another tooth except I am prepared in a similar manner so as to have no pain."

February 1st, 1847. The following cases were operated on to-day, in the presence of fifteen gentlemen, most of them members of the profession:—

John Coombes, aged 56, a labourer on the roads, residing at Charlton, of a strong plethoric habit of body. Whilst at work he met with an accident (three weeks back,) to the middle finger of the right hand; mortification took place, and the first joint sloughed away; still he would not consent to the loss of the finger, and the disease extended to the metacarpal bone. Having heard he could have it taken off without suffering any pain he applied this morning to have the operation performed. The æther was inhaled and the man under its effects in six minutes. He remained so for five more, and the finger was taken off by a V shaped incision, opening the metacarpal bone half way down with Liston's bone nippers. The patient did not shew the slightest sign of pain, and stated that he heard the bone cut, but positively asserted he felt no uneasiness of any kind, and grumbled much at the suffering we gave him when taking up the arteries afterwards. I allowed this case to remain for half an hour before I dressed it, as I am inclined to think secondary hæmorrhage will often occur after the effects of the æther have passed away; reaction does not until then become perfectly established. Small arteries often escape untied if we dress immediately, and union will not take place so well on account of extravasation of blood. The pulse in this case was before the operation 84, and during the æthereal process it varied from 60 to 70.

William Guy, aged 21, residing at No. 44, Duke Street, of a pale exsanguineous habit of body; has had phymosis from syphilis for several months, and wishing to have the glans penis liberated, submitted to the operation. The æther was inhaled, and produced its effects in three minutes. The skin was then divided down to the end of the glans without any sign of pain, and he states he did not feel anything of it. Pulse when in the æthereal state was 75, and soft, and before that time 90.

A servant, aged 30, had four stumps extracted without giving her the slightest pain, by Mr. S. Tibbs, surgeon-dentist of this town. The æther was inhaled from a modification of Dr. Snow's apparatus, and she got under its influence in less than two minutes, and remained so nearly five. Positively states she felt nothing.

Lot Organ, aged 36, residing in Grove Street, of spare habit of body, has had a disease of the left elbow-joint for the last year or two, and would not consent to its being amputated before, but the general health becoming injured, he now consented. The æther was given with Snow's apparatus, and after its inhalation for nearly four minutes, he appeared quite unconscious; the healthy arm dropped involuntarily to the side when

raised, eyelids closed, and all the usual signs of insensibility to pain. The circular incision was now made through the skin, and he cried out most lustily, and continued doing so through the whole stage of the operation. After it was all over he stated he felt the first cut, and also the bone sawed, but he was in a dream, and smoking a pipe, which some one tried to take from him.

I can only view this case as a failure, and I think it right alike to report all, whether failures or not. The other cases were decidedly successful. I may state in the above operation the mouth-piece did not nicely fit the mouth, and he appeared to have inhaled fresh air by its side.

Albion House, Cheltenham,
February, 1847.

REMOVAL OF THE GREAT TOE AND PART OF THE METATARSAL BONE, UNDER THE INFLUENCE OF ÆTHER.

By T. Herefrt Barker, M.B., M.R.C.S.

Emma Rawlins, aged 23, of Cople, near Bedford, had been labouring under strumous disease of the great toe, involving the phalanges and part of the metatarsal bone, during the last five years, and was anxious to have the diseased parts removed by operation.

Desirous of giving her the benefit of inhaling the vapour of æther, I procured the apparatus constructed under the directions of Dr. Boott and Mr. James Robinson, and sold by Mr. Hooper, of Pall Mall, London, and yesterday removed the parts in the following manner, with the kind assistance of Mr. Hurst, and in the presence of Messrs. C. W. Hyne, W. Bailey, Anthony, Birch, Cox, and Ravenscroft:—

Having succeeded in about four minutes in getting her thoroughly under the influence of the vapour, a flap of good size was made, with a scalpel on the inner side of the foot, the metatarsal bone being laid bare beyond the extent of the disease. A strong bistoury was then passed through the space between the metatarsal bones of the first and second toe, in close contact with the former, and brought out anteriorly; the flexor and extensor tendons were divided, and the metatarsal bone nipped through with Liston's forceps. The exposed surfaces were sponged, and the flap secured by three points of interrupted suture.

During the operation, which lasted but a short time, the supply of vapour was cut off by means of the stop-cock; she did not in the least shrink from the knife, nor did she manifest in any way the slightest sign or expression of pain. On regaining her consciousness, she inquired when the operation would commence, and on being told that it was all over, stated that she had been asleep and dreaming.

The testimony of so many operators has already been recorded of the efficacy of the inhaled æther, in completely deadening the sensibility of the system, during severe and protracted operations, that there cannot be a doubt that this is one of the *greatest* discoveries of the age, productive as has been that age of great discoveries.

I thought it desirable that my patient should be previously tutored in the process of inhaling, and for that purpose induced her to inhale the æther the day before the operation, which she did, to the entire satisfaction of both of us. This appears to be a matter of some importance, and likely to contribute to the success of the process, for there are several precautions which are better thus explained beforehand, and the patient will be less likely to be affected by timidity at the time of the operation.

The points which appear to require particular attention are:—

1. To tutor the patient beforehand in the process of inhaling.

2. To give charge of the inhaling apparatus to a trustworthy assistant, who should keep the mouth-pad in firm contact with the lips.

3. To allow two or three inspirations to be made *before* removing the small stopper, and applying the nasal spring, otherwise the full volume of the vapour will be likely to excite coughing and a sense of suffocation.

4. To cut off the supply of vapour for a time, by turning the stop-cock and removing the nasal nipper, when deep insensibility has been produced.

The *morbid* effects of the inhalation of æther have yet to be made out, and good service will be rendered to the profession and humanity, by any one who will investigate the precise effects of this powerful agent, when administered in cases complicated with pulmonary, cardiac, or cerebral mischief. Some affections of the heart, and a strong predisposition to cerebral disease, will probably be found to be the morbid conditions more particularly contra-indicating its employment.

Bedford, February 16, 1847.

REMOVAL OF THE NAIL FROM THE GREAT TOE, UNDER THE INFLUENCE OF THE VAPOUR OF SULPHURIC ÆTHER.

On Monday, January 18th, Mr. Rudall, surgeon, of Sheepwash, North Devon, in the presence of J. G. Maxwell, Esq., performed the operation of removal of the great toe nail with part of the toe, on the person of an athletic farm-labourer, aged 22 years, the patient being put under the influence of the æther vapour. The result in the most satisfactory manner, confirmed all that has been reported of this extraordinary means of subduing pain in the performance of surgical operations. The vapour was administered by means of an apparatus extemporaneously constructed, and consisted of a large-sized bullock's bladder, to which was connected a tube of half an inch in calibre, and two and a half inches in length, this was attached to a bulb capable of containing about eight ounces of fluid; continued from this was a tube seven inches in length, and a quarter of an inch in calibre. The æther (six drachms,) being put into the bladder, which was afterwards inflated, and the tube being introduced into the patient's mouth, the inhalation was commenced. In rather less than one minute perfect insensibility was produced, a gentle tremulous motion of the lips,

and a slight rising and extension of the left arm, were the only actions observable after the first few inhalations. The operation was now begun and completed in two minutes more. Thus, from the commencement of the inhalation to the completion of the operation only three minutes elapsed. The pulse, which at first beat 72 strokes in a minute, rose during the administration of the vapour to 120 strokes. At the end of the inhalation it became intermitting and after a short period was scarcely perceptible. A small quantity of spirit and water was administered. After the lapse of five minutes sensibility appeared to be returning, and he muttered something in which he made use of the word "mother." He afterwards said he thought he had been walking with her. It was fifteen minutes before he became sensible of surrounding objects. He knew nothing of the operation that had been peformed on him,—said that he had been asleep,—that he had experienced no unpleasant sensations,—and that he wished to go to sleep again. He says that he felt drowsy for two hours.

The patient never had an unfavourable symptom; the only dressing used was cold water; and at the end of a fortnight he resumed his thick boots and returned to his labour.

OPERATION FOR LITHOTOMY PERFORMED UNDER THE INFLUENCE OF ÆTHER: DEATH.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

At a time when the attention of both the medical profession and the public is being called to the influence of æthereal vapour, as an agent in diminishing pain during surgical operations, you may probably consider the accompanying case of sufficient interest to be admitted into your columns.

I am, Sir,

Yours obediently,

ROGER S. NUNN,

Surgeon to the Colchester and Essex Hospital.

Colchester, February 26, 1847.

On Friday, the 12th inst., I operated upon Thomas Herbert, aged 52, the subject of stone in the bladder, in the presence of most of the medical gentlemen of the town and neighbourhood. The æther was exhibited by my colleague, Dr. Williams, who considered the patient to be sufficiently under its influence after inhaling it seven or eight minutes, at the end of which time I commenced the operation. There was neither difficulty nor loss of time in cutting into the bladder; but having done that, some little delay occurred in grasping the stone, which was small, very flat, and lying in the posterior part of the bladder. The delay was also increased by the extremely relaxed state of the bladder itself, which seemed to fall in folds upon the forceps, and to cover the stone. The time occupied from the commencement of the operation to the period when the man was unbound, was ten minutes, during which the æther was administered at intervals. The patient was placed fully under its influence, and the breathing first became heavy, and ultimately stertorous. He recovered, however, from its effects after a short time, and continued in a quiet passive state, but without decided re-action, for twenty-four hours.

At this period he had a severe chill, which lasted for nearly twenty minutes. Mr. Taylor (the house-surgeon,) immediately gave him two ounces of brandy, with an equal quantity of water, after which the patient remained in a dozing state till eight o'clock p.m., when the house-surgeon considered it necessary to send for me, as a state of complete prostration or collapse had ensued. I ordered small quantities of brandy and water, (half brandy,) with arrow-root, at intervals, wrapped him in hot blankets, placed bottles of hot water in the bed, &c. This treatment was kept up till nine o'clock the following morning, when ammonia was given, alternately with the afore-mentioned stimulants. The patient seemed incoherent from eight o'clock p.m. of Saturday, till nine a.m. of the following day, when symptoms of slight re-action appeared.

At a consultation of the medical staff which was held at this time, it was determined that the same treatment should be continued, (modified according to circumstances,) and that in addition, a stimulating injection should be exhibited. The effect of the injection was to increase slightly the frequency of the heart's pulsation, but without exciting his nervous energies. From this period he gradually sank, and died at five o'clock, p.m., being sensible to the last.

I should here mention, that the small vessels which are necessarily divided in making the first incision, shewed much inclination to bleed, owing, I imagine, to their want of contractile power; I therefore, to prevent any unnecessary hæmorrhage, secured them immediately after the patient was put to bed, so that he did not lose much blood.

Post-mortem, sixty-seven hours after death. Membranous congestion of the brain, but no effusion; brain firm; lungs permeable throughout, anteriorly exsanguineous, posteriorly engorged; heart flaccid, of a natural size, and nearly empty; left kidney pale, the right slightly congested; the bladder and the adjoining parts presented the usual aspects after an operation.

(Signed,) E. WILLIAMS, M.D.,
ALDERMAN PARTRIDGE,
WILLIAM WAYLEN,
ROGER S. NUNN,
JOHN CHURCHILL,
CHARLES E. BLAIR,
WALTER JOHNSON,
THOMAS TAYLOR.

I would mention that the blood throughout the whole vascular system, was in a perfectly fluid state.

It is not my intention or inclination to attribute the loss of my patient wholly to the influence of the æther which was administered in this case, nor hastily to decry its use under all circumstances connected with surgical operations; but still, I feel called upon to bring before the notice of my medical brethren, the effect which resulted from its exhibition in this instance, that the profession may judge from the recital of an unsuccessful case,

how far it may be considered safe to employ æther generally as a means of preventing the pain, otherwise inseparable, from physical lesion. The suffused eye, livid lips, and stertorous breathing, accompanied first by convulsive struggles, and next by a sudden cessation of all motion, are often indications of the effects of the vapour, and these were not altogether absent in the present instance. Still, I felt myself justified in employing it, from the published accounts of many successful cases, and the sanction of my colleagues and numerous friends around me.

In prosecuting the operation, there was nothing peculiar to attract my attention, or to lead me to consider the patient's physical condition differed from that of those on whom I had before operated, until I had reached the bladder, when I cannot but attribute the difficulty in seizing the stone to the apparently collapsed state of that viscus, which had fallen in folds over the calculus, and so prevented its bring grasped by the forceps. I must not, however, omit to mention the fact, that the patient expressed no signs of suffering during the operation. Thus far, therefore, it may be said the æther fulfilled its intended office; but I think another question is involved—viz., whether the artificial means thus employed may not produce very serious depressing effects on the nervous system, depriving a patient of that re-active power so necessary to the reparative process? Has not a patient, after the administration of æther, a double shock to overcome,—that produced by the vapour, superadded to that of the operation itself? Does not the history of the *post-mortem* examination bear out the suspicion of the depressing influence of this inhalation?—positively, from the still fluid state of the blood, (although the body was not opened for sixty-seven hours after death,) and from the flaccid state of the heart,—negatively from the fact that the inspection detected no indications of violence done to the parts that could explain the rapid dissolution which ensued, and that there was no evidence of Nature having made the slightest effort towards local reparation. Pain is doubtless our great safeguard under ordinary circumstances; but for it we should hourly be running into danger, and I am inclined to believe that pain should be considered as a healthy indication, and an essential concomitant with surgical operations, and that it is amply compensated for by the effects it produces on the system as a natural incentive to reparative action.

I trust that the publication of this unsuccessful case may lead to the publicity of many others which have occurred, so that the profession may not be led away by the erroneous supposition that the prevention of pain is so vital a desideratum in operative surgery.

General Retrospect.

ANATOMY AND PHYSIOLOGY.

ON THE UTRICULAR GLANDS OF THE UTERUS.

By Ernest Henri Weber.

After conception, the mucous lining of the uterus in woman softens and increases in thickness, and is then known as the "*membruna decidua.*" This change is the consequence of an increased development, both of the vascular membrane and of its epithelial investment.

The blood-vessels of this mucous tissue and the utricular glands increase in volume, and their interstices are occupied by elementary cells of new formation, many of which are destitute of nuclei.

In the human female, the uterine glands are enlarged after conception, and become tortuous and of an utricular form. As in the stomach, these glands are placed perpendicularly to the mucous surface, their orifice being towards the cavity of the organ. These orifices have been long known to exist in the deciduous membrane, to which they impart a cribriform aspect.

The uterine glands in the cat and bitch are only enlarged to any amount at the spot on which the placenta is implanted. They are at all times visible in these animals, independently of pregnancy, and consist of two species of glands; one small and simple, the other larger and branching. Both increase after conception; the former throughout their entire length; the others principally at that part which is nearest the intra-uterine orifice. At a certain point the trunk of the second order of glandules enlarges in the form of a pouch, which touches the parietes of the neighbouring blood-vessels, which convey the maternal blood. The villosities of the chorion which contain the ultimate ramifications of the umbilical vessels of the embryo, penetrate into the orifices of these uterine glands, and expanding in their cavities, form with them a single investment to the embryonic vessels. This membrane and its duplicatures surround the uterine blood-vessels, which, as has before been said, ramify on the interstices of the glands. After this union, the part of the membrane which was derived from the parietes of the uterine glands, becomes sensibly thinned by absorption.

Once formed, the placenta of the bitch is traversed by a dense network of tortuous capillary vessels, which conveys the maternal blood. Each of these capillary vessels is closely invested by a membrane, which contains a fine network of capillaries, derived from the vascular system of the embryo. It thus appears that the fœtal blood flows through a vascular network, over the surface of the larger vessels which contain the maternal blood. The two sets of vessels, however, do not communicate directly.

In the human female, the uterine glands appear to be increased in size over the whole surface of the uterus. Weber has not noticed that one part of their trunk dilates more than another, neither has he observed that the villosities of the chorion penetrate their cavities as in the bitch,—on the contrary, they are perfectly free. This difference in the formation of the placenta in the human female and in the bitch, is thought to be in some manner due to the formation of a "*decidua reflexa.*"

The human placenta then differs from that of the bitch:—1st. The dense network of vessels which conveys the maternal blood and traverses the entire placenta, consists in the human female of tubes of a much larger diameter, but with thinner walls. 2nd.

The other constituent part of the placenta, the villosities of the chorion, which convey the fine network of embryonic capillaries, form in the bitch, membranes and folds, and in the human species ramifications, which terminate in fine threads, interrupted here and there by nodular enlargements.

In the perfectly formed placenta, both in the human female and the bitch, the vessels which convey the maternal and fœtal blood are in intimate apposition. This is effected in the bitch, by the first named vessels being closely enveloped by the villosities of the chorion; but in woman the reverse is the case, the ramifications and the filaments of the villosities being surrounded by the enlarged vessels, which carry the maternal blood.

If it should eventually be demonstrated that the villosities of the chorion penetrate into the cavities of the uterine glands in the human female as in the bitch, the opinion above given will not be interfered with, for it will still be necessary to prove that the terminal filaments of the villosities are inserted, and as it were, soldered to the walls of the uterine glands. —*Archives d'Anatomie*, Dec., 1846.

PRACTICAL MEDICINE.

ON THE EFFECTS OF EMETICS IN YOUNG CHILDREN.

[The following remarks, by Dr. Beck, are worthy of attentive consideration, and we believe from frequent observations of the manner in which pulmonary diseases of infants are treated, that they are in no wise exaggerated :—]

1. As a general rule we need not be afraid of vomiting the youngest child, provided the means used are mild, such as ipecacuanha, &c. The mere act of vomiting is attended with no danger, while the remedial agency of an emetic is one of great power and value. Besides acting on the stomach, it extends its influence to the mucous membrane lining the pulmonary organs, promoting secretion in the first place, and then aiding in dislodging and ejecting morbid accumulations; accordingly, in pulmonary affections, there is nothing so efficacious.

2. The vomiting induced by the preparations of antimony ought to be resorted to with great caution in very young children, and should never be used except in those cases where a sedative effect is required, and can be borne with safety. Inflammatory excitement ought then always to be present to justify its use in a young child. Where the object is simply to evacuate the stomach, it ought never to be thought of. In such cases as croup and pneumonic inflammation, it may be justifiably and beneficially used. In these cases it will be found that the system can bear the sedative influence of the antimony much better than it can in the ordinary conditions of the system. Even here, however, care should be taken not to push the antimony too far, as dangerous collapse has been known sometimes to be the result.

3. The *continued use* of tartar emetic in young subjects cannot be too specially guarded against. It is in this way, probably, that it is so apt to prove injurious. A single dose, even though it vomits very freely, may be borne with comparative impunity, while the repetition of it may keep up nausea and intestinal irritation, so as to cause injurious prostration. This is very likely to happen in cases of a chronic character, like hooping-cough. Although mild emetics are among our best remedies in this disease, and where the subject is old enough, a single emetic of antimony is frequently exceedingly beneficial, yet the repeated use of antimonial emetics, as is too often the case, appears to me to be a great error in practice. It is not indicated by the nature of the symptoms, and violates a great rule which ought always to be observed in the management of chronic cases, and that is, not to break down unnecessarily the strength of the patient. Again, in ordinary catarrhal affections in children, a good deal of mischief is frequently done by the continued use of expectorant mixtures containing this active article.

4. As the effect of tartar emetic on the system cannot always be measured by its emetic operation, even in the adult, this fact ought to serve as a caution against the too common practice of giving repeated doses of it to produce vomiting in children, when they happen to be narcotized. While it fails to vomit, it may still operate as a poison to the system. In all cases of this kind, the proper method of treatment is, not to push the emetic, but to endeavour to restore the sensibility of the patient, and then sometimes vomiting comes on at once.

5. In using tartar emetic in children, especial regard should be had to their constitutions. In those naturally delicate, and especially where the scrofulous diathesis exists, it should never be used if it can be avoided. Prostration is much more apt to ensue in them, and where the article is persisted in for any length of time, is sure to do harm. It is in such constitutions, when labouring under hooping-cough, and where the use of this article has been too long continued, that the baneful effects of it are most strikingly observed.

6. It is perhaps hardly necessary to say, that if tartar emetic be an article of such danger, the younger the subject to whom it is given, the more likely is it to do harm. In children under a year, I should say, as a general rule, it ought never to be used. During that period, the powers of life are too feeble to bear so active a remedy, at the same time that all the beneficial effects of an emetic may be gained from the use of ipecacuanha, or even milder means.—*New York Journal of Medicine*, and *Dublin Medical Press*, Jan. 20, 1847.

SURGERY.

ERECTILE TUMOUR OF THE HEAD OF THE TIBIA; LIGATURE OF THE FEMORAL ARTERY : DEATH.

This instance of a disease which has only of late years attracted the attention it deserves, occurred at the Hotel Dieu of Toulouse.

The patient, a female, aged 25, experienced for the first time, about March, 1843, indistinct pains in the left leg. These pains were transient and did not impede the motions of the joint. About the middle of the year she fell from a chair and struck her limb, after which the disease from which she eventually died, declared itself more positively. A tumour was now

perceptible in the region of the head of the tibia, which was leeched by the surgeon in attendance, as may be imagined, without relief, but on the contrary it rapidly increased in size, until November, when it exhibited the following appearances:—At the upper part of the left leg immediately below the knee, an irregular tumour was perceived, consisting of two unequal elevations, hard and resisting, incompressible and not painful on pressure. Pulsations were also plainly perceptible isochronous with the arterial diastole; there was also a slight *bruit de soufflet*. Both the pulsations and bruit ceased on compression of the crural artery. The knee-joint and the poplitieal space were in their natural condition; the general health was good. The *diagnosis* was, erectile tumour of the head of the tibia.

The operation decided upon, namely, ligature of the crural artery, was performed in the January succeeding, the female being at the time five months pregnant. As soon as the ligature was applied, the pulsation in the tumour entirely ceased. The next day the tumour was considerably diminished in size, and the patient was to all appearance doing well in every respect; but it was speedily observed that suppurative inflammation of the cellular tissue had supervened; pleurisy with effusion followed, and the patient died at the end of the week, after having miscarried.

Post-mortem. Sero-purulent effusion in the left pleura, with compression of the lung; other organs healthy. The cellular tissue of the thigh on which the operation had been performed, was filled with pus, which had burrowed among the muscles in every direction. On removing the integument from the tumour, it was found to be hard and incompressible in some parts, fragile in others, and crepitating on pressure like dry parchment. In some points the bony tissue had completely disappeared. A division of the head of the tibia shewed that the tumour was composed of a tissue of varied colour, being yellow in some spots, rose-coloured in others, and spotted so as to resemble a section of the brain. The mass of the tumour appeared to consist of two substances,—one of a chalky white and inorganic, the other having an areolar appearance and appearing to contain the former. Here and there masses resembling fat appeared, as well as spots, having the aspect of softened encephaloid matter.

These varieties of diseased structure had entirely replaced the spongy tissue of the bone, but the cartilage was unaffected. The more solid formations of the bone were reduced to a complete shell. No vessel of any size was traced into the tumour.—*Gazette des Hôpitaux*, Jan., 1847.

ON THE TREATMENT OF CERTAIN SURGICAL AFFECTIONS BY ELEVATION OF THE DISEASED PARTS.

M. Gerdy has for some time been in the habit of treating certain inflammatory affections by placing the limb, or part, in such a position as to favour the return of blood to the heart. This plan has this advantage, that it does not exclude the application of the usual means of treatment; but, as is shown by M. Dupuy, it is in many cases in itself sufficient to effect a cure.

The question meets us *in limine*. What are the phenomena which are induced by elevating a part of the body? If the hand, for instance, be allowed to hang down, we observe that it becomes engorged with blood. Place it in the contrary position, and the livid colour disappears, and the vessels empty themselves. It is evident from this experiment that in the first instance the blood accumulates in the most depending part; in the other the reverse occurs, the blood readily finding its way towards the centre of the circulation. What is thus seen to occur in a healthy condition of parts, also happens under certain modifications in disease. M. Dupuy gives the following account of the practical application of the above principles:—

If the thumb or hand be inflamed, the patient is made to lie in such a position that the elbow is maintained in a position higher than the shoulder. The fore-arm is placed perpendicular, supported by cushions, care being specially taken that the circulation is not impeded by bandages; the hand is then enveloped in bandages, to which tapes are fixed, and attached to the top of the bed. These means, with some simple modifications, are likewise made use of in inflammation of the lower extremities. M. Gerdy raises the end of the bed by placing a chair under it, thus raising the foot upon the summit of an inclined plane. Once so placed, and care being taken that no injurious pressure is exerted, the patient must not move from the position even to satisfy natural wants; for he may destroy in a few minutes all the benefits which have been obtained by whole days of repose. Although elevation cannot be so efficaciously applied to the *head* and *trunk* as to the extremities, it yet may be employed to a certain extent. Supposing the *eye* to be inflamed,—the patient will lie with his head high, and on the opposite side to the one affected. Why are inflammatory affections and discharges from the *womb* so tedious in recovery, but for the stagnation of the blood in the organ? Let a woman, who has been accustomed to keep herself in the vertical posture, go to bed, and raise her hips by means of pillows, and she will soon find her case amended. The same principles apply to inflammatory affections of the face, breasts, &c.

The advantage of this plan of treatment is not, however, confined to inflammation, but it is equally serviceable in ulcers, uterine hæmorrhages, and varicose veins. In many instances of the latter disease, in M. Gerdy's wards, elevation alone of the limb has been completely successful. The utility of the plan is also incontestible in varicocele. The communication of M. Dupuy terminates with these conclusions:—

1st. That elevation of the diseased part is able, without the intervention of other therapeutical measures, to cut short certain inflammations, if it be employed sufficiently early.

2nd. That in phlegmon it relieves pain by diminishing the quantity of blood in the part.

3rd. That it advances the cure of engorgements and chronic profluvia of the uterus.

4th. That certain hæmorrhages may be suspended by it.

5th. That it is able to cure certain ulcers of the lower extremities.

6th. That varices and hæmorrhoids areadvantageously modified by elevation.

7th. That where it is not sufficient in itself to effect a cure, it is always a potent auxiliary.—*Archives Générales*, Nov., 1846.

METHOD FOR PREVENTING THE PROJECTION OF THE BONES IN FRACTURE OF THE LEG.

The leg is to be placed in the bent position on the outside, with a common side splint placed above and below, slightly hollowed out to fit the leg. In addition to these, two straight splints are used, padded on one side,—one of sufficient length to extend from the patella to the upper part of the lower third of the leg, the other long enough to reach from the hollow of the knee to beyond the heel. If the straps be now passed round the leg, including the shorter of the two straight splints on the front, and the longer splint on the back of the leg, along with the two bottom splints on the upper and under side, the tibia and fibula above the fracture will be pushed backwards, whilst the foot with the part below the fracture is pressed forwards. In this manner the tendency of the tibia to pass forwards, after simple dislocation or fracture near the ankle, is effectually prevented.—*Ormerod's Clinical Observations*, p. 52.

ON THE COMBINATION OF SENNA WITH MATICO IN HÆMORRHAGE FROM THE BOWELS IN FEVER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I have frequently used matico in cases of hæmorrhage, but I was much pleased about three months ago, with the benefit obtained from combining it with senna, in a case of typhus fever, where hæmorrhage from the bowels took place. As I had previously attended to the state of the liver, &c., I immediately ordered Matico and Foliorum Sennæ, utrq. dr. ij., to be infused in a pint of boiling water, and a wine glassful to be taken frequently. Scybala mingled with blood soon passed the intestines, after which less blood flowed, and by continuing the above mixture in similar doses at various intervals for three or four days, during which time the alvine evacuations gradually improved, my patient soon got rid of this troublesome symptom.

I make these hasty remarks in order that this remedy, (Matico,) which I consider one of the most valuable additions lately made to the Materia Medica, may be more used in the various forms in which disease is constantly taking place in these wondrous coils, whose healthy functions are so essential to the well-being of man, and the inferior animals. I used this combination with a view, not only to arrest the hæmorrhage, but also to prevent the diarrhœa which frequently follows it in fever cases. Anything which will obviate this, is worthy of the attention of those who are anxious to combat, alleviate, or remove the sufferings, in every form, of their fellow creatures.

The publication of Dr. Hartle's valuable communication to Dr. Jeffreys, in the last number of our Journal, has emboldened me to address this note, which, if you think worthy a place in the pages of the *Provincial Medical and Surgical Journal*, you are at liberty to insert.

I am, Sir,

Your most obedient Servant,

ISAAC WATMOUGH, M.D.

Pocklington, Yorkshire,
March 4th, 1847.

BIOGRAPHICAL NOTICE OF THE LATE MR. DODD.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

In the biographical notice of my excellent and lamented friend, Mr. Dodd, published in your last number, there is a slight error which I will thank you to correct at your convenience. I am desirous that this should be done, not so much for my own sake, or for the sake of the eminent friends who at different times saw Mr. Dodd along with me, (viz., Sir James Clark, Dr. Watson, and Dr. Walshe,) as for the sake of *auscultation*, which might be supposed, from this statement, to have faltered egregiously in a very simple case.

The passage I refer to is the following:—"There was much gravitation in both lungs posteriorly, but principally in the right, where the greater portion of the posterior lobe was gorged with blood, and was very friable. There was, however, in this situation, neither fibrous nor any other deposit, except the infiltration of blood, nor hepatization or any adventitious growth, *though it was in this situation, and this only, that disease had been long suspected.*" Now, the truth is, that some years before my poor friend's death, all the gentlemen above mentioned, as well as myself, had, on separate examinations, recognized disease in the upper lobe of the right lung, and subsequently in the left, and none in the inferior lobes.

In some notes now lying before me of the last examination I made, (Sept. 27th, 1846,) I find the signs indicate as close an approximation to the condition of the lungs found on dissection as could reasonably be expected to be made four months before death. The principal of these signs are:—Greater dulness of the right side generally than the left, anteriorly; greater dulness of the left side than the right over the lower lobes, posteriorly; great dulness on the axillary aspect on the right side; a comparatively good sound on the lower portion of the right back. On the *right side*, respiration cavernous above the clavicle, with pectoriloquy, (the parts here greatly sunk in,) also on the sternal border of the subclavicular region; strongly bronchial on the axillary face; in many places the respiration extremely feeble or null, with various forms of rhonchi, crepitant and others. On the lower portion of the back the respiration strong, (puerile;) higher up, in the scapular, intra-scapular, and supra-scapular regions, there is the same marked crepitus as anteriorly. Nearly the same state of things was found on

the *left side*; under the clavicle, the respiration is stated to be markedly bronchial, with the expiration greatly prolonged, and loud bronchophony, (pectoriloquy ?) the bronchial respiration being increased lower down; in the axillary aspect the respiration is more natural, but becoming bronchial towards the pectoral border; on the top of the shoulder the same strong bronchial respiration, with greatly prolonged expiration, as on the front; respiration very feeble on the lower parts posteriorly.

No doubt, part at least, of the conditions of the lower lobes found after death was produced subsequently to my last examination.

I am, Sir,
Yours faithfully,
JOHN FORBES.

London, March 5, 1847.

[The erroneous statement referred to, was made to the gentleman to whom we are indebted for the notice of our lamented associate, by Mr. Dodd himself, and repeated many times. It affords another instance of the peculiar disposition which is so often manifested by phthisical patients, to flatter themselves and others as to the real nature of the disease under which they are suffering.—Ed.]

Medical Intelligence.

EFFECTS OF ÆTHER INHALATION IN PARTURITION.

The following extract of a letter from a correspondent, in reference to the subject, dated Paris, February 25th, may not be unacceptable to our readers:—

"The mind of the profession here, is entirely occupied upon the æther question, to the temporary exclusion of all others. The Baron Dubois read a very interesting paper to the Academy of Medicine the day before yesterday, giving the details of six cases of protracted and difficult labours, in which the vapour of sulphuric æther was inhaled with marked advantage. The particulars will be almost immediately published, but in the interim I may as well tell you that the results of the Baron's experience warrant him in concluding that the vapour of the æther may be inhaled by parturient women:—1st, without any danger to mother or child; 2nd, with advantage to both, in so much as that it destroys all resistance in the voluntary muscles of the perineum, relaxing or rather paralysing them for the moment, without impeding or interfering in the slightest degree with the natural physiological muscular actions of the uterus. The Baron has also observed that the abdominal muscles in their actions in parturition are not at all affected by the inhaled æther.

"The two first cases—both instrumental—one in labour forty hours, the other thirty-six, before the vapour was inhaled, turned out ultimately unfortunate, as both patients died of puerperal fever which was at the time prevailing in the hospital, (La Maternité.) This sad result the Baron does not think can be ascribed at all to the use of the vapour; nor does he on the other hand attribute the immunity of the other patients in the same hospital to it.

"The Baron upon interrogating the patients after delivery as to their sensations during the operation, was informed by all but one, that they felt nothing of what was doing, but that one smiled and would not say what she had felt. It afterwards turned out that this patient, by her confessions to the nurse, was ashamed to say what she felt and thought, as she found herself *engaged*, all the time whilst under the influence of the æther and undergoing the operation of delivery, *with her husband*, in that preliminary process which is so essential to the bringing about of that condition in which ladies like to be who love their lords.

"There is an American dentist here disputing the honour of the discovery with Dr. Jackson. This dentist, a Doctor Wells, or Way, says he made the discovery by induction, in 1844, and that after many successful experiments in his own practice, he travelled from the city of Hertford, in Connecticut, to Boston, to lay the discovery before Dr. Jackson. He was introduced by Dr. Jackson to his class after lecture, and made some experiments before them, but they unfortunately failed, and the young men, to use his own words, denounced him as an impostor. He returned to Hertford, and there continued to use the inhalation in his practice with constant success. Such is his account to the Academy of Medicine and to the Institute here, and his claim to the discovery is under consideration."

HOMŒOPATHY.

Madame Hahnemann, widow of the celebrated founder of Homœopathy, was summoned on the 20th ultimo, before the correctional tribunal at Paris, for having illegally practised the medical art. The prosecution was directed by the procureur du roi, on a complaint by M. Orfila, senior member of the faculty of medicine. Madame Hahnemann declared that she had received a diploma as Doctor of Medicine, in Pennsylvania. She also stated that she never received pecuniary remuneration. M. Delau, M.D., of Montpellier, confirmed the latter fact, and stated that he often consulted Madame Hahnemann. The court pronounced judgment thus:—"Whereas, Madame Hahnemann had, without diploma or certificate available in France, illegally practised as a doctor, and at the same time compounded and sold, without legal authority, medical preparations, offences provided against by the law, the said widow Hahnemann be condemned to 100 francs fine, and to the expenses."—*Lancet.*

MEDICAL APPOINTMENTS.

James Paget, Esq., Professor of Surgery to the Royal College of Surgeons, has been elected Assistant Surgeon to St. Bartholomew's Hospital, in the room of Mr. Lloyd, lately appointed Surgeon.

Dr. R. F. Lindoe has been elected Physician to the Eastern Dispensary, Bath, in the room of Dr. Tarleton, resigned.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members, Friday, February 19, 1847:—H. Davies; T. Pratt; L. P. Madden; J. Nash; J. W. Poland; A. Gozybowski; A. Asmar; R. B. Sawer; E. L. Webb; J. Hutchinson.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, February 18th :—John Bleeck, Bristol; Temple Chevallier Paley, Gretford; Edward Monement, Lynn Regis; George Pretyman Hubbard, Bury St. Edmunds; Anthony Unthank, Nottingham.

ROYAL MEDICO-CHIRURGICAL SOCIETY OF LONDON.

At the Anniversary Meeting of the Royal Medico-Chirurgical Society, held on Monday, March 1st, the following gentlemen were elected officers for the ensuing year:—*President:* James Moncrieff Arnott, F.R.S.—*Vice-Presidents:* Robert Ferguson, M.D.; Jonathan Pereira, M.D., F.R.S.; Robert Liston, F.R.S.; Richard Partridge, F.R.S.—*Treasurers:* George Burrows, M.D.; Benjamin Phillips, F.R.S.—*Secretaries:* George Cursham, M.D.; Fred. Le Gros Clark.—*Librarians:* William Baly, M.D.; Richard Quain, F.R.S.—*Other Members of Council:* George Budd, M.D., F.R.S.; W. F. Chambers, K.C.H., M.D., F.R.S.; P. N. Kingston, M.D.; Thomas Mayo, M.D., F.R.S.; James Arthur Wilson, M.D.; Henry Ancell; Richard Blagden; George Busk; Charles Hawkins; Benjamin Travers, F.R.S.

DEPUTATION TO SIR GEORGE GREY.

We are authorised to state, that a deputation from the Council of the Provincial Medical and Surgical Association, has had an interview with the Right Hon. Sir George Grey, and that from the result of this interview, strong hopes are entertained that a settlement of the questions connected with Medical Reform, satisfactory to all branches of the profession, may be obtained. These hopes are, however, dependent upon some approach to unanimity, in the concession of minor points, being manifested by the different sections of the profession.

OBITUARY.

Died, February 12th, at Enniscorthy, of fever, John B. Macartney, Esq., M.D., F.R.C.S, of Ireland, &c. &c.

February 15th, at Wellington, Somerset, aged 36, Albert Langley, Esq., Surgeon.

February 20th, at Edinburgh, John Pitcairn, Esq., M.D.

February 26th, aged 58, of angina pectoris, George G. Bompas, Esq., M.D., of Fishponds, Bristol, long a member of the Provincial Medical and Surgical Association, and President-Elect of the Bath and Bristol Branch. Dr. Bompas was possessed of considerable scientific attainments, especially in his own branch of the profession—the relief of mental disease. He was of mild and amiable deportment, a model of the christian gentleman, and all his actions were influenced by a feeling of deep responsibility. These characteristics were especially manifested in the performance of his professional duties, and although not an implicit follower of what is called the non-restraint system, his judicious and gentle management of the patients entrusted to his care effected the successful restoration of the mental powers in a very remarkable degree.

February 27th, at Carlisle, Railton Atkinson, Esq., M.D.

Lately, at Dungannon, of fever, William Dawson, Esq., M.D., Medical Officer of the Workhouse.

Lately, at Paris, Dr. M. Cottereau, the associate of M. Raspail.

In December last, at Rio Janeira, M. Felix D'Arcet, one of the Commissioners appointed by the French Government to examine and report on the plague of Egypt.

BOOKS RECEIVED.

The London and Provincial Medical Directory. 1847. London: Churchill. pp. 288 and 362.

Medicines, their Uses and Mode of Administration, &c., &c. By J. Moore Neligan, M.D., Edin., M.R.I.A., Licentiate of the College of Physicians of Ireland, Physician to Jervis Street Hospital, &c., &c. Second Edition. Dublin: Fannin and Co. 1847. 8vo. pp. 485.

On the Mechanism of Respiration. By Francis Sibson, Esq. (From the "Philosophical Transactions.") London: Taylors. 1846. 4to. Plates.

On Diseases of the Skin. By Erasmus Wilson, F.R.S., Consulting Surgeon to St. Pancras Infirmary, Lecturer on Anatomy and Physiology to the Middlesex School of Medicine, &c., &c. Second Edition. London: Churchill. 1847. 8vo. pp. 482. Plates.

On Cataract, Artificial Pupil, and Strabismus. By F. H. Brett, Esq., M.D., F.R.C.S., Surgeon to the Western Institution for Diseases of the Eye, &c., &c. London: Churchill. 1847. 8vo. pp. 89. Plates.

Report of the Liverpool Eye and Ear Infirmary, for the year 1846. Liverpool: 1847. 8vo. pp. 33.

Notes on the Inhalation of Sulphuric Æther in the Practice of Midwifery. By J. Y. Simpson, M.D., F.R.S.E., Professor of Midwifery in the University of Edinburgh, and Physician Accoucheur to her Majesty in Scotland. (From the "Monthly Journal of Medical Science.") Edinburgh: Sutherland and Knox. 1847. 8vo. pp. 11.

Medical Statistics; their Force and Fallacies. A Lecture delivered in Park Street School of Medicine, November 4th, 1846. By James F. Duncan, A.M., M.B., Fellow of the King's and Queen's College of Physicians, Physician Extraordinary to Sir P. Dun's and Mercer's Hospitals, &c. Dublin: McGlashan. 1847. 8vo. pp. 42.

TO CORRESPONDENTS.

Communications have been received from Mr. F. Buckell; A Member; the Sheffield Medical Society; Mr. W. C. Worthington; Chirurgo-Medicus; Dr. Cullen; Mr. W. F. Clarke; Mr. P. Wright.

The Æther-Quackery shall be noticed in the next number, with some other points connected with the subject of Æthereal Inhalation, which we have been compelled to omit.

It is requested that all letters and communications be sent to Dr. Streeten, Foregate Street, Worcester. Parcels and books for review, may be addressed to the Editor of the Provincial Medical and Surgical Journal, care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL
MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON CLINICAL MEDICINE.

By W. R. Basham, M.D., Physician to the Westminster Hospital.

Lecture VIII.

Case of Ptosis, symptomatic of cerebral disease: History of the case, treatment, and convalescence.—Difference in the characters of ptosis as an affection per se, and as a symptom of more remote disease. Loss of power in the second, third, and branches of the fifth and seventh nerves.—Condition of the parts to which these nerves were distributed; extent of the local paralysis; reasons for referring the origin of the attack to apoplexy. Progress of the treatment, and present condition of the patient.

Gentlemen,—The case of ptosis of the left eye, with partial paralysis of the retina, loss of mobility in the iris, and of sensation in the nerves distributed to the scalp of that side, with subsequent exaltation of sensation, is of much interest, of rare occurrence, and very instructive as regards the therapeutic action of the remedies employed. The man was discharged last week convalescent. The history of the case declares the disease to have been in its origin caused by some local injury occurring at the base of the brain, after the manner of an apoplectic attack, and involving the optic nerve and branches of the third, fifth, and seventh.

A. B., aged 49, married, a labouring man, of short stature and dusky complexion, complained of acute paroxysms of pain confined to the left half of the scalp and neck, also dropping of the left eyelid, with darting lancinating pain in the ball of that eye. He was placed in Burdett ward. About fourteen days since, while sitting at the fire he suddenly fell from his chair insensible. He was immediately bled by a surgeon who was quickly in attendance; before a pint of blood was drawn sensibility returned, and he then became conscious of the closure of the left eye, with loss of vision in that eye, and a numbed sensation in the scalp. There was no paralysis of any other organ, or deficiency of sensation in any other portion of the surface; no incontinence of urine or fœces. Has been merely purged by some black draught, and has taken no other medicine since the attack. One half of the scalp bounded by the median line and commencing at the left eye, and passing upward to the sinciput and thence to the occiput, but not descending lower than the nape of the neck, and along the edge of the trapezius muscle for nearly an inch and a half, then abruptly passing in front and upwards to the chin, the left cheek and ear being included, so that exactly one half of the cranial surface was involved in this state of altered sensibility. The tongue is not affected, nor is there any loss of muscular power except in the action of the levator palpebræ of the left eye, the eyelid being depressed so as to half close the eye. There is no want of power in the orbicularis palbebrarum of this eye, as by its action the lids can be completely closed, and indeed by a voluntary effort can be tightly closed, effectually resisting any attempt to raise the upper lid mechanically by the finger till the action of the orbicularis is relaxed. The state of sensibility in these parts is not that of entire deprivation; it partakes more of the condition of some forms of neuralgia, the affected region being at times numbed and insensible to external impressions; at other times the sensibility is much exalted, and acute excruciating paroxysms of pain dart through the eyeball, cheek, and even over the scalp to the back of the head. When the left lid is raised the left eye is natural in appearance, the cornea perfectly clear; sclerotic, not injected; margin of the pupil well defined; the pupil free from cloud, opalescence, or any coloured appearance; the iris, is however, only sluggishly sensitive to the action of light. The motions of the eyeball are not made with precision, the patient appearing to have but an imperfect command over them; when directed to look to the right or left or straight forward, these several acts are hesitatingly performed. The power of vision in this eye is deficient. When the lid is raised he perceives only a greyish light, which he can distinguish from the darkness when the lid is closed, but he can recognize no object even held ever so close. The sight of the right eye is perfect. Lancinating pains are frequent in the ball of the left eye. These paroxysms are worse at night. Has not slept for many nights. The features of the left side, when the face is at rest, do not appear affected; but when he speaks a singular expression occasionally passes across the features, as if from want of consent in the action of the muscles of the left with those of the right side. The general health does not appear impaired; tongue clean; pulse small and regular; heart's sounds natural.

He was ordered Quinæ Disulph, gr. ij.; Pilul. Hydrargyri, gr. ij., ter die. Hydrarg. Chlorid., gr. iv.; Pulv. Scammon. Co., gr. x., statim. Morphia Acet., gr. ss., omni nocte.

On the fourth day from admission, he is reported to have suffered much less pain, and to have passed much better nights. An improved diet was ordered. On the tenth day, it is stated that the pain is much less severe, the intermissions being longer; slight tendernes of the gums; has acquired a greater power over the affected lid, and can slightly raise it; the iris is less sluggish to the influence of the light, and the patient states that he can perceive the light stronger and brighter. The mercury was withdrawn; Quinæ Disulph. gr. ij.; Extr. Aloes, gr. j., ter die.

On the twenty-first day, had recovered nearly complete power over the affected lid; the pain in the eye and scalp is much diminished both in intensity and frequency; he can distinguish the bars in the window, and even intervening objects faintly. On the twenty-ninth, vision had become nearly perfect with the left eye; could distinguish most objects with the left eye alone; some indistinctness for distant objects; paralysis of the levator palpebræ of the left eye has entirely disappeared, the aspect of the two eyelids being identical. The state of the features when speaking presents now nothing remarkable. He is quite free from pain, but states that he occasionally feels the top of his head numbed, and when scratched, deficient in sensation, but that this feeling is not constant; the general health is good, and it is hoped that in a short time all vestiges of this cerebral affection may be removed.

In offering to you some clinical observations on this case, let me first direct your attention to the symptom most palpably evident,—one that without any complaint on the part of the patient you could not fail to notice, namely, the dropping of the left eye-lid, termed ptosis, from a Greek word πτωσις, simply meaning to fall down. Ptosis may be considered either as an affection *per se*, or as a *symptom* of internal cerebral disease. The first is dependent on certain integumentary conditions,—such as hypertrophy of the cellular tissue of the upper lid, or excess of integument, so that power of the levator palpebræ is overcome by the mass of the lid to be raised. It is comparatively a trivial affection, and is frequently relieved by surgical operation, and it must be carefully distinguished from the dropping lid, which, as a symptom, is one of considerable moment, as indicating some serious organic lesion in the encephalon.

When ptosis is a symptom of cerebral disease, it does not occur alone, there are usually several other concurring conditions sufficiently explicit, pointing to the cerebral centre as their source.

Now in this case, the second point of observation was the numbed and deficient sensibility of the cheek, forehead, scalp, and chin of the left side. Our attention was next fixed upon the loss of vision; the left eye, unable to distinguish form or colour, was yet faintly sensible to the difference between light and dark. We next noticed the sluggish motions of the iris to the action of light; then the uncertain action of the muscles of the eye-ball; and lastly, the play of the features on the opposite sides of the face, was not consentaneous when the patient spoke or laughed. This circumstance was evident; but when the countenance was at rest, no want of unity of expression appeared to exist. With such a category of symptoms could there be any doubt as to the presence of some cerebral condition, as the cause of this aberration of sensibility and motion? But I wish to make this clearly evident to you, and in doing so, you will not fail to perceive how confessedly dependent is pathology upon anatomy and physiology, and how little of the nature or cause of disease could be known or discovered without the aid of these sciences,—sciences which are as indisputably the foundation of all true pathology, as they are indispensably the basis of all certain, well-directed, and efficient therapeutical practice.

The muscular power of the levator palpebræ is dependent on a branch of the third nerve; the perceptive faculty of the eye is regulated by the optic nerve; the sensibility to the influence of light, and the mobility of the iris, arise from the ciliary nerves, derived from the ophthalmic ganglion, which is formed by a portion of the fifth, and a branch of the third nerves; the motions of the eye-ball are influenced by the third or motor occuli as it is called; the sensitiveness of the skin of the cheek, scalp, forehead, and chin, is due to the fifth; while the muscles of the face are guided in their motions by the branches of the portio dura of the seventh. We thus find that the second, third, fifth, and seventh nerves, are deprived of a certain amount of the healthy influence exercised over the muscles and parts to which they are distributed. There was something singular in the degree or extent to which these nerves were deprived of their accustomed power; in none could it be said that there was total paralysis, or complete loss of power; vision was not totally obliterated; the patient could distinguish between light and dark; sensation in the cheek, forehead, and scalp, was not entirely lost; the parts were rather numbed than paralysed; the laying of the finger gently on the forehead or cheek was not felt; but if the skin was pinched he winced. Moreover, there was at times much exaltation of sensibility in these parts, lancinating excruciating pain darting in paroxysms through the affected nerves. The mobility of the eye-ball was only imperfect—not destroyed. When told to look to the right or left, upwards or downwards, the motions were made without precision,—awkwardly, hesitatingly, as though the muscles were not perfectly under the influence of the will. It could not be said that the iris was insensible to light, it was only sluggish to its influence. The injury therefore to these nerves was partial and not complete; their functions may be said to have been suspended rather than destroyed. From so many nerves being implicated, and the partial manner in which these were affected, it could not be doubted that the morbid cause was operating at the roots of these nerves,—at their cerebral centres, not at the extremity of their peripheral distribution. To the brain, therefore, we were to look for the special morbid cause.

Now, the history of the attack materially aids us in our diagnosis. Sitting by the fire, he suddenly becomes insensible, and falls after the manner of a fit, from which he recovers to find a surgeon extracting blood from his arm. As complete consciousness returned, he became aware of the loss of sight in the

left eye, and that he could not raise the lid, and that he could scarce feel his left cheek or the scalp of his head, which felt as he stated as if *asleep*. Can we for a moment doubt that this attack was of the nature of apoplexy; in its mildest form perhaps, but nevertheless dependent on a lesion of some portion of the encephalic apparatus. It would be idle in the absence of all proof, to speculate upon the particular spot in the brain in which this lesion had occurred; it is more than probable, however, that the base of the brain must be the spot, but whether in the thalamus, corpus striatum, pons Varolii, or any other portion having relation to the roots of these nerves, it is useless to speculate upon.

Considering then this case to be in its origin cerebral, and possessing all the features of an apoplectic attack, with the formation of a clot in some part of the encephaloid mass, the treatment was based upon those principles which guide us in ordinary cases of paralysis from apoplectic causes. From the mildness of the symptoms, and the paralysis being so limited, a favourable prognosis was pronounced. It was hoped that the influence of mercury in alterative doses might promote the removal of the morbid influences acting on the nerves. With this intent, blue pill was given twice a day, in ten grain doses; and to check the intermitting character of the paroxysms of pain, which so violently affected him, quinine was combined with it. This treatment was pursued till the gums faintly indicated the influence of mercury in the system, and from that moment there was a daily and visible amelioration of all the symptoms. The paroxysms of pain first became less urgent; an increasing power over the levator palpebræ was soon evident, and the powers of vision were sufficiently improved to enable him to define the bars of the windows. The mercury was now withdrawn, and its place supplied with small doses of purified aloes, in conjunction with the quinine. You have seen the patient to-day; vision is not yet perfect; when the right eye is closed he can distinguish persons, but not clearly; he can number those standing before him, but he cannot clearly recognize features or colour with the affected eye. The restoration of the levator palpebræ is, however, complete; the two eyes exactly correspond, and he can raise and drop the left eye-lid at pleasure; the motions of the eye-ball are precise and regular, and the iris of the left eye is now equally sensible to the influence of light as the right.

As a specimen of local and partial paralysis from apoplexy, this case must be viewed as one of much interest; and it is equally so in respect of the influence that appropriate remedies exercise over the morbid cause of the paralysis; and to you, gentlemen, it is an example, I hope not thrown away, of the value and absolute utility of anatomical and physiological knowledge, in reading the mysteries of diseased action; for it must be clear to you, that if you did not know the distribution of the several nerves implicated, and were unacquainted with the peculiarity of the special functions they severally perform, it would have been impossible for you to interpret the source from whence these symptoms were derived.

ON THE MEANS BY WHICH UTERINE HÆMORRHAGE IS SUPPRESSED WITHOUT ARTIFICIAL ASSISTANCE.

By Thomas Radford, M.D., Consulting Physician to the Lying-in Hospital, &c., Manchester.

A knowledge of the inherent powers of the living body to stop hæmorrhage from the uterus, is of the highest importance to the obstetrician. Without an intimate acquaintance with their mode of operation, he can never practise successfully. All the principles of our art ought to be based on a clear and comprehensive knowledge of the plans adopted by nature when danger exists and threatens the destruction of life. On this account I have not hesitated to lay a brief statement of them before the profession. Although the following observations may not possess the attraction of originality, yet I believe, that every well-thinking and judicious practitioner will admit the value of such, if judiciously made. The following is an enumeration of the natural anti-hæmorrhagic powers:—1st, syncope; 2nd, coagulation of the blood; 3rd, effusion of lymph and obliteration of the vessels; 4th, re-union of the detached portion of the placenta to the uterus; 5th, death of the child; 6th, uterine contraction; 7th, spontaneous rupture of the membranes; 8th, spontaneous separation of the placenta.

Complete or partial syncope sooner or later is induced when blood is discharged from the vascular system; the difference depends on a variety of contingent circumstances which may exist at the time. When we wish to make a quick and powerful constitutional impression by venesection, we make a larger orifice, so that the blood runs *pleno rivo*. We place our patient erect; and if of feeble constitution, or if the habits are bad, the effect is sooner produced, and continues longer. So in floodings, we find the relative effects very different; some women bear an immense loss without apparently suffering much from it, whilst others rapidly succumb from the same or even a less amount of discharge. Sudden and profuse gushes of blood speedily produce fainting, but slow and dribbling hæmorrhages continue for a considerable length of time without producing this effect. Although these latter kind of floodings do not so suddenly depress the vital powers, yet they insidiously undermine them, and in many of these cases the life of the patient is ultimately placed in more jeopardy than in those of the former class, provided the patient is not immediately destroyed.

Great caution is necessary not to allow a principle, based on false security, to lead the practitioner to procrastination in adopting active measures; his judgment ought not to be led astray by the quantity of blood which has been already discharged, or is now being lost, but he should invariably direct his attention to the influence produced on the vital powers, as the immediate and remote effects of loss of blood are relatively

so different in different women. These different relative effects depend on a variety of circumstances,—on the age, habits, and constitution of the woman; on the condition of the brain and general nervous system; on the functional and structural organic state of the thoracic and abdominal viscera; on the state of the uterus; on the position of the patient when the accident happens; and on the mode by which the blood is discharged, &c. When we are considering syncope as a natural and sanatory effect, capable of producing such favourable changes in the general circulation, and also in the vessels from which the blood is poured, which tend to suppress the hæmorrhages, we ought not to overlook the fact that syncope is sometimes the precursor or harbinger of death.

Our diagnosis here should be as exact as possible, to judge between salutary and mortal syncope. If this state of the vital powers is produced by a large and sudden but not continued gush of blood, or by a less quantity lost when the patient is in the erect position, then conditionally it may be considered as likely to be useful. But if, on the contrary, the hæmorrhage has been going on for a long time, although slowly yet insidiously, and thereby at last producing the accumulated effects of loss of blood upon the system, we must view it as the prelude of death. By its salutary power the action of the heart and arteries is at first totally suspended, and afterwards lessened in force and frequency, by which less blood is sent to the uterus, and time is afforded for coagulation to take place within or in the immediate vicinity of the vessels.

When blood is effused it speedily coagulates if their exists any substance which affords a *point d'appui* for the commencement of this process. It is said by physiologists, that the blood is more disposed to assume this change in case of excessive hæmorrhage. When one of the umbilical arteries or veins is ruptured within the substance of the placenta, and the structure of the uterine and fœtal surfaces are uninjured, the effused blood being confined soon forms a clot, which effectually stops further bleeding. Other similar accidents happen during the same pregnancy in different parts of the placenta. But if the injury extends through either surface coagulation does not so easily take place, as the blood so readily escapes externally into the vagina, or internally into the amnion bag, according to the situation of that portion of the organ which is disrupted. The characters of clots which form and are seen in the substance of the placenta vary according to the length of time which has elapsed since the accident. Sometimes hæmorrhage happens between the uterus and the placenta, and is confined in the centre by the circumference of this latter organ firmly maintaining its adherence. If this effusion is not great, coagulation takes place, and subsequent changes are accomplished, so that pregnancy goes on.

In disruptions of the placenta the coagula form in its interstitial structure. In several fatal cases of *post-partem* hæmorrhage in which I have examined the uterus after death, I have found a small portion of adherent placenta, whose structure was so entirely pervaded with coagulated blood as at first to be mistaken for a clot; but on a more minute examination its true character was discovered. In another fatal case of this kind the practitioner in his report of the *post-mortem* examination, represented the infiltrated portion of placenta as a polypus. Coagula form within the uterine venous openings, upon and in the interstitial tissue of the placental tufts which enter into them, and are found left after the separation and expulsion of the placenta. The meshes of the decidual membrane afford a surface on which coagula form and adhere. Dr. Blundell and other writers speak in the highest terms of the anti-hæmorrhagic powers of the large clots of blood which form in and fill the vagina, but which in my opinion are overrated. Although I do not admit that they prove as valuable a resource in flooding as has been mentioned, yet I would caution the obstetrician not to rashly remove them, for if they do not directly arrest the bleeding, they indirectly assist by giving support to those formed above in the interstitial, placental, and decidual substances, which are of the greatest utility. Nevertheless, the presence of coagula in the vagina ought never to interfere with our more important duty to explore, so as to ascertain the condition of the os and cervix uteri, the presentation of the child, or if the placenta is anormally fixed.

The important and valuable principles first fully developed by Dr. Jones, are admirably and indeed effectively adapted to prevent bleeding from arteries laid open by injuries, or by surgical operations in other parts of the body, but are not applicable in cases of uterine hæmorrhage. Although the uterine arteries have a similar organization to that possessed by those elsewhere situated, yet they differ in size at different periods and perform very different offices, in the ungravid, in the gravid, and during the parturient and puerperal periods.

It is stated by some writers that a re-union takes place between the uterus and the detached portion of placenta, and that a return of flooding is thereby prevented; but my opinion is entirely at variance with this assertion, and from a great number of observations made by examination of the placenta after its expulsion, I am convinced that a recurrence of the hæmorrhage from the placenta is alone prevented by a change which takes place in the organization of the detached portion.

The death of the child in utero may be immediately produced by hæmorrhage, or it may more remotely happen by the impairment which its organic system has sustained. But it is not to be understood that the child is invariably or inevitably destroyed when hæmorrhage occurs, but on the contrary, it is born

alive in the great majority of these cases. However, statistics shew that this event happens sufficiently often to justify the opinion that I have formed, that flooding does not take place, or if it does, it is very moderate in degree in such cases. Under normal circumstances, the utero-placental and the placento-fœtal circulations exercise a reciprocal, although not an equal, influence on each other; and that there exists on the part of the placento-fœtal, a great and essential derivative power. But the death of the child, immediately to a certain degree, and ultimately altogether, changes the functional and structural conditions of the placenta. "The stimulus of necessity" on the part of the child for a supply has ceased, and consequently is altered. The arteries convey to the uterus less blood, and so there is less accumulated in the veins to be returned to the general circulation. The passage of blood is most likely first stopped in the umbilical arteries; and very soon after, if not simultaneously, that through the umbilical vein also ceases, and consequently both the arterial and venous ramifications in the placenta would have no blood passing through them.

The placenta would therefore at first be in a somewhat similar condition to that which exists after the birth and separation of the child; but after a short time it undergoes farther progressive changes in its organic condition. Its structure becomes less spongy and more firm; the calibres of the vessels are lessened and filled with fibrin; its decidual surface has a dried and shrivelled appearance, and is dotted with small coagula of different aspect, some being recent, while others look old and fibrinous.

During my practice I have attended a great number of labours in which the child was dead, and I have invariably observed, that there was little or no sanguineous discharge when the placenta was expelled, or afterwards, as that which is termed the lochia. There were four cases of placenta prævia in this number, which I shall briefly cite.

In one case the hæmorrhage happened at the sixth month. Cold water, &c. &c., and the plug were used; opium was administered, &c. These means effectually restrained the bleeding. It however returned with violence in a fortnight, and again the same plan was successfully adopted. After this time the movements of the child became gradually more imperceptible, and at last ceased altogether. Six weeks after the first attack of the hœmorrhage labour came on, but there was no bleeding; the placenta separated on one side, so that the head passed by it. When the child was born it had the appearance of having been some time dead; the placenta was also considerably changed; there was no farther loss of blood.

In the second case an excessive hæmorrhage happened at the seventh month; there were no pains. Plugged successfully, cold applications, &c. In a month the bleeding recurred, but as there was no evidence of labour, the plug was introduced, and the means before-mentioned used. The hæmorrhage ceased. The death of the child was indicated by the usual mammary changes, &c. At the end of a fortnight labour pains came on, and as the os uteri allowed, I passed the hand, separated the edge of the placenta, and turned and delivered the child, which had evidently been dead some time. There was no flooding.

In the third case the flooding first took place from the seventh to the eighth month, and was afterwards several times repeated. The last attack was so violent as to threaten danger. The os uteri being rigid, the plug was introduced, an abdominal bandage applied, &c. She never felt the child after the last attack. The labour did not come on for a fortnight, but there was no farther loss of blood.

The fourth case was excessive flooding at the eighth month. There being no signs of labour, and the os uteri being firm and undilated, the plug was introduced, and the abdominal bandage applied, &c. The child had been vigorous up to this date, but since has not been felt to move. She went on to her full period, and as there was no flooding, the placenta was partially detached, the membranes ruptured, and the uterus acting well, the case was left to nature. The child was putrid, and the placenta was much altered. No after discharge occurred.

The gravid uterus mainly consists of muscular fibres, which are greatly developed at the end of pregnancy. The blood-vessels, arteries, and veins, have acquired a great size,—especially the veins. The muscular fibres are longitudinal, circular, and oblique, each set being interlaced with the others. Portions of this tissue are intimately distributed around the arteries and veins, and indeed the outer coats of these latter vessels are composed of it. The arteries, which are considerably elongated, take a spiral and tortuous course through this texture; the veins are situated in different tiers in it, and each division freely inter-communicates by oblique openings with each other, and with those which lie nearest to the uterine cavity. Mr. Owen makes the following appropriate remarks:—

"Every vein, however, when traced to the inner surface of the uterus, appeared to terminate in an open mouth on that aspect; the *peripheral* portion of the coat of the vein, or that next the uterus, ending in a well-defined and smooth semicircular margin, the central part adhering to, and being continuous with, the decidua. In the course of this dissection I observed that when the veins of different planes communicated with each other in the substance of the walls of the uterus, the central portion of the parietes of the superficial vein invariably projected in a semilunar form into the deeper-seated one, and when (as was frequently the case, and especially at the point of termination on the inner surface,) two or even three of these

wide venous channels communicated with a deeper sinus at the same point, the semilunar edges decussated each other, so as to allow only a very small part of the deep-seated vein to be seen. It need scarcely be observed how admirably this structure is adapted to ensure the arrest of the current of blood through these passages upon the contraction of the muscular fibres with which they are every where immediately surrounded."—Note to the paper, "On the Structure of the Placenta," in John Hunter's works, edited by Palmer, page 68.

Mr. John Goodsir passed a probe into a vein, and then slit it up with scissors, and repeated the same plan whenever he found the entrance of another branch. He found the anastomosis of the veins increase as they approach the internal surface of the uterus. "The spaces which they inclosed, presenting the appearances of narrow flat bands. At last, in introducing the probe under the falciform edges of the venous orifices, it was found to have arrived at the placental tufts, which could be seen by raising the edges of the falciform edges, &c."

The tissues of the fundus and body of the uterus are first developed, and afterwards the cervix and os. These changes are progressive, and gradually enlarge the cavity as the fœtus and appendages increase in size. In normal pregnancy the muscular fibres are quiescent, and passively yield to this law, which has been imposed on the organ for the safety and growth of the ovum; but as soon as the fœtus is matured, so that it is capable of extra-uterine existence, a new law predominates, and contraction follows. The body and fundus being more muscular, are endowed with greater irritability and contractility than the cervix, and at first they are chiefly employed in expulsion. Some writers deny the existence of muscularity, and consequently contraction, in the cervix, but the great majority admit that it is possessed of a great number of circular and some few longitudinal fibres. Its first change in labour is to dilate, to allow the passage of the child and secundines. This is said by some to be the effect of a wedge, formed by the membranes, mechanically forced down by the power above. Others again say it is a muscular act. My opinion is that it contracts when required in the process of labour. Normal causes applied induce irregular contraction. Dr. Campbell says that a contraction of this portion of the uterus is mistaken for what is described as hour-glass contraction of the body of the organ.

Normal uterine contraction, which is of two kinds, —first, temporary or alternate,—secondly, permanent or tonic, is able to perform the parturient function when every circumstance which acts directly or indirectly upon this process, is equally favourable for this end. By its power the child and placenta is expelled, and the woman is secured against the dangers of flooding. It must not be partial in its operation, in order to achieve these important objects; but it must be universal; every muscular fibre must be actively engaged to afford a sanatory and protective influence. It is necessary to remember the length and tortuous course of the arteries, and also the course, relative position, and the peculiar valve-like openings of inter-communication of the veins; the imbedment of these vessels in the muscular tissue, and surrounded by it. We must also not overlook the fact that the calibre of these vessels is fully occcupied by the blood passing in this state through the parietes of the full gravid uterus, whose superficies is extensive. Then we can be at no loss to understand why uterine contraction is so powerfully anti-hæmorrhagic. The measurement of the surface of the gravid uterus at the end of pregnancy or beginning of labour, compared with the same organ when regularly and tonically contracted after the expulsion of its contents, is very different indeed. Dr. Blundell emphatically remarks that the muscular fibres act as so many ligatures upon the vessels.

Notwithstanding the beautiful adaptation of the means to the end, when all is in a normal state, we frequently find in practice that there are constitutional and local conditions,—physical and moral causes, which produce upon the uterus anormal effects; and hence we find its action perverted, or altered in power, and in some cases altogether suspended. This anormal state of uterine energy exists in every degree, and comes on at all times during or after labour, constituting what is usually called cases of complete or partial atony, or irregular contraction. Partial contraction assumes the character of spasm, and may seize any portion of the uterus to any extent, and to any degree of intensity. The fundus may firmly contract, whilst the body and cervix are in a relaxed state; the circular fibres of the body may contract, and yet the fundus and cervix be uncontracted, and thus constitute hour-glass contraction. Sometimes the os and cervix contract, and the upper portion of the organ is atonic, thereby affording a shut-up cavity, in which the placenta is sometimes incarcerated, and sometimes a large quantity of blood is effused into it, which is called internal flooding.

Different sets of muscular fibres irregularly and successively contract, and change in such a way as to form small chambers, which open out of the general uterine cavity. I will briefly cite a case selected from many others, illustrative of the capricious state (if I may use the term,) of the muscular fibres. I was requested by Mr. P., to visit a patient who was flooding, one child being born, and another thought to be still in utero. Upon my arrival the hæmorrhage continued. On placing my hand on the abdomen, I found the uterus large and generally doughy; about the middle was a hard and resistant portion, at the boundary of which there was felt a vacillatory sensation, which

continued some time; it yielded in a short time, and another hardened portion was found. The sensations produced by these contractions led to the notion of the existence of a second child. I now introduced the hand, and only found the placenta and some coagulated blood. My attention was called to a circular opening at the anterior part of the womb, through which I could pass two fingers; to my surprize this spasm yielded, and was soon succeeded by a similar state in another part. I endeavoured to produce uniform contraction, but this migratory irregular action continued for some time, notwithstanding a large dose of laudanum was given.

Irregular contraction of a portion of the uterus in the vicinity of the placenta causes partial separation of it, and flooding happens. Again, one portion of the uterus in the same neighbourhood may be atonic, and the rest of the organ well contracted, and so flooding continues. Whenever and by whatever cause a partial contraction of the placenta happens, irregular contraction of a portion of the uterus is nearly sure to take place. Spasm or irregular uterine contraction, causes hæmorrhage in two ways,—first, by directly producing a partial disunion of the placenta from the uterus; secondly, by acting mechanically, so as to impede the free return of blood along the veins to the heart. In all cases of flooding, except when the placenta is anormally fixed to the uterus, regular, equal, and firm uterine contraction will always secure the patient against the dangers of the accident. I hesitate not to say always, because an extensive hospital practice has enabled me to speak positively on this subject. But if the uterus is in any degree atonic, or its action irregular, however partial, hæmorrhage will happen, which can alone be arrested by restoring uniform contraction, or an equilibrium of action throughout the entire uterine muscular tissue.

These remarks are made with a knowledge of Dr. Gooch, Dr. Rigby, Dr. Ingleby, and Velpeau's opinions. Dr. Gooch relates a case of *post-partem* hæmorrhage, in which he says the uterus was firmly contracted, and depended on the exalted state of the general vascular system.—"Medico-Chirurgical Transactions," vol. xiii., part 1. Mr. Roberton has already shown that Dr. Gooch's inferences are not true, (*North of England Journal*;) I, however, do not think that he has explained the cause of the discharges in Dr. Gooch's case, in supposing that the uterus relaxed. My opinion is that there existed irregular contraction, some portion of the organ being in an atonic state, not accessible to Dr. Gooch's hand externally applied on the abdomen.

In placenta prævia the hæmorrhage is increased by uterine contraction, as long as the placenta is partially adherent.

Spontaneous rupture of the membranes, and the discharge of the liquor amnii, induces uterine contraction, which effectually restrains hæmorrhage in the majority of cases of accidental, and in those cases of unavoidable, floodings which are caused by a partial implantation of the placenta over the os uteri.

The natural powers are equal to the achievement of most important ends during labour, when mechanical causes exist which oppose the passage of the child in labour.

When the placenta is placed centrally, or nearly so, over the os uteri, it is sometimes spontaneously expelled before the child, an event which happens more frequently than has been usually supposed by obstetricians. Hippocrates was acquainted with the fact that the placenta is sometimes spontaneously expelled before the child, and knew the danger of this event to the child. He says, "that the after-burthen should come forth after the child; for if it come first, the child cannot live because he takes his life from it, as a plant doth from the earth." The father of medicine no doubt knew that the coming forth of the after-birth before the child, was not attended with the same risk to the mother as to her offspring, or he would have recorded his opinion upon this point.

Obstetric writers up to comparatively a recent date, since the time of Hipocrates, have not mentioned this subject, although they must have met with cases, and have been acquainted with his writings. Whenever the placenta is partially detached in cases of placenta prævia, and the child is still alive, hæmorrhage inevitably happens. The quantity of blood discharged is not always the same, but is more or less profuse, according to the concurrence of a number of contingent circumstances. Sometimes the discharge is very excessive when the placenta is only slightly separated, and sometimes the hæmorrhage is moderate when the placenta is extensively loosened. But the aspect of matters is changed by a complete separation of the placenta; the variation in the degree of discharge marked above, is not now observed to exist; there is a total cessation of the bleeding, and it forms an exception to the general rule when hæmorrhage happens after the placenta has been completely loosened from its attachments, and protruded from the uterus into the vagina.

On the 10th day of December 1844, I delivered a lecture on galvanism applied to the treatment of uterine hæmorrhage, in which I then stated that without any great pains I had brought forward before the profession "thirty-six cases illustrative of her (Nature's) powers, in expelling the placenta before the child." This number might have been very considerably augmented by bringing cases which were then already published, but my object was not to make a great parade of authorities, but only to mention such as were in the reach of every obstetric practitioner. At the time, I made the following remarks:—"Now, the bulk of these cases, gentlemen, have been detailed without any

specific practical object, and, consequently, are more valuable to my present purpose than if they had occurred to myself, and had been brought forward to serve my own particular views. You may refer to many of them yourselves, and you will find in nearly all of them that the hæmorrhage was suppressed after the placenta was thrown off."—*Provincial Medical and Surgical Journal.* 1844. p. 603.

Since then Dr. Simpson published (in the *London and Edinburgh Monthly Journal of Medical Science,* No. 51, March, 1845,) tables of 141 cases, some of which, however, were not cases of spontaneous expulsion. These tables include those cases which had already been brought forward by me, and some others which were afterwards communicated by me.

By the kindness of several professional gentlemen I have collected sixty, which shew the following results:—In all, the hæmorrhage was great before the placenta was loosened; in fifty-five of this number it was completly suppressed after the separation of the placenta; in three it continued, of which in two it was slight, in one it was profuse; in thirteen the placenta was forcibly expelled followed immediately by the child; in twenty, two to three hours elapsed; in twenty-seven the child was turned and extracted immediately. Forty-five women recovered, fifteen died. Fifty-five children were lost, five only living.

In the above mentioned cases there is only one in which flooding to any degree continued after the placenta was completely separated, and this proved fatal. In the remaining number of those who died, the fatal impression was made before the separation was accomplished. In a few cases already published slight hæmorrhage continued, and some deaths occurred not dependent on the after bleeding, but as above mentioned from the effects produced before. These cases must not be allowed to invalidate the inference, "that hæmorrhage ceases when the placenta is completely separated." We can readily understand why this should happen if we physiologically investigate how the utero-placental, and the placento-fœtal circulations are carried on.

When a partial separation of the placenta takes place whilst the fœtus in utero is still living, hæmorrhage is sure to occur, because two sources exist from which blood can escape. (*Vide Lancet,* No. 9, February 27, 1847.) One current of blood comes through the medium of that portion of the placenta which still adheres to the uterus, and is discharged from the surface of that portion of the placenta which is detached; the supply of blood is demanded by the child from the maternal system, and when sent, it cannot from the nature of the accident return, and therefore, is lost: the other current of blood which runs away, comes from the uterine venous openings. But when there is complete disjunction of the placenta from the uterus, the case stands quite different; no maternal blood can be discharged from the placenta, because it is now placed in the position of a foreign body, having no structural or physiological relation to the womb. Rupture of the membranes either simultaneously happens, or precedes the separation and expulsion of the placenta, except in cases where the entire ovum is expelled at once, which very rarely occurs. The uterine contraction, which must at this time have been strong, is now increased, which brings the presenting part of the child to occupy the lower segment of the uterus, and to bear mechanically on the exposed venous openings. The calibres of the vessels are also diminished.

Notwithstanding the truth of the above conclusion,—that complete detachment of the placenta suppresses hæmorrhage, yet we must not allow ourselves to fall into serious error to wait in expectation of such an event,—because, first, there do not exist signs which will lead us to expect such a termination; secondly, the vital powers may be completely sunk before the separation is achieved. Hamilton, Collins, and Dr. Ramsbotham, senior, were all acquainted with this fact.

March 10, 1847.

OBSERVATIONS ON THE TREATMENT OF ORCHITIS BY COMPRESSION.

By George Frederick Wills, Esq., Surgeon, Crewkerne.

The beneficial effect of pressure in cases of inflammation of the testicle has been for sometime generally known, but from some cause the practice is not so extensively followed as we should be led to expect from the excellent consequences which have resulted from its employment. The fear of producing such an aggravation of the sufferings of the patient, as would counterbalance any good effect which this mode of treatment may exercise on the disease, has been made an excuse for not employing it; and some have argued that where a little pressure increases the pain and thus augments the sufferings of the patient, the employment of constant and firm pressure must necessarily do a proportionate degree of harm. But experience tells us this is not the case, and although the remedy seems severe, it in reality is not so, for it greatly alleviates pain, while at the same time it subdues the disease. I believe that if this mode of treatment were more generally followed, we should find that the number of cases with chronic enlargement of the testis would be far less than at present.

It may be asked, what are the advantages which this mode of treatment possesses over others? It will therefore be as well to refer to the methods in general use and point out some of the inconveniences, if not disadvantages which arise from their employment.

Bleeding is seldom useful except when there is much inflammatory fever. *Leeches* have been the favourite

remedy with many, but there is no practitioner who has had recourse to them who does not know, even in cases where they have been most beneficial, how inconvenient their application always must be. In cases of orchitis the great wish of the patient is to keep secret the cause of his illness, and this can scarcely be done where leeches are used. If a few are applied they seldom do much good, and the expense of many often proves an objection to their use.

Purgatives of course are useful in this disease, but they are not of themselves sufficient to effect a cure.

The same may also be said of *narcotics*, and especially of *opium*.

Mercury is frequently administered in large quantities, and we find ptyalism often occurs before any impression is made on the disease. Excepting in very severe cases this remedy is almost as bad as the disease, and it may do harm when gonorrhœa is present, as of course it often is in cases of orchitis.

Emetic tartar is the remedy most commonly employed, and in many cases it subdues the inflammation. Unpleasent as this medicine is when taken in the nauseating doses requisite, it doubtless does a great deal of good in many cases.

The local application of *cold lotions* or *warm fomentations*, will be found beneficial, more especially the latter, with or without the addition of laudanum or aconite. A warm bran poultice with hydrochlorate of ammonia in it is also useful.

With all these, however, one thing is needful,—entire rest, either in bed or on a couch, and it often proves very inconvenient to the patient to be obliged to submit to this necessary restriction.

Suppose then, that the patient after some days treatment with either of the above remedies, is better, and the inflammation has subsided,—is he well? Certainly not. The testis remains enlarged, hard, painful from its weight, and liable on the slightest injury to take on inflammation, and render the patient incapable of attending to his employment for some days more. If it goes on ever so favourably, a long period must elapse before all the enlargement which remains will yield, either to the employment of mercury or iodine, however diligently applied.

I have thought it best to notice the merits and demerits of the remedies usually employed before speaking of the advantages which result from the use of compression. Some time ago Fricke, of Hamburgh, proposed compression of the testicle when the acute stage of orchitis had subsided; and in sub-acute cases of the disease, Ricord, in France, used it also to a great extent, and I believe still continues it. The practice has now found its advocates in many of our hospitals, although it has not come into general use. Mr. Curling, Mr. Acton, and Mr. Langston Parker, have also used it with success; and at the Seaman's Hospital Mr. Busk almost uniformly follows the practice, and with great success. The following cases will show how effectually it acts in arresting the inflammatory process in the different stages of the disease:—

CASE I.

December 16th. J. T. contracted gonorrhœa about a month since; he has never had orchitis before. He yesterday found the testis becoming painful, and it soon swelled to a large size. It has within the last twenty-four hours become of the size of a hen's egg, is extremely painful and tender, and the scrotum is red and inflamed. There is also pain along the cord, general febrile disturbance, and the gonorrhœa continues. Strips of adhesive plaster were firmly applied round the affected testis, and for the first five minutes caused an increase of pain. He soon, however, became easier, and remained so.

18th. The straps having become very loose from the diminished size of the testis, they were removed, and fresh ones firmly applied.

20th. The straps came off; the testis has almost returned to its natural size, and there is but little induration remaining.

CASE II.

July 4th. R. T., aged 22, has had gonorrhœa eleven days. Six days ago the discharge lessened, and four days ago the right testis became inflamed. Has had gonorrhœa, but not orchitis, before. The testis was strapped with soap plaster, and cubebs given internally.

6th. The testis smaller and less painful. Restrapped.

11th. The testis has regained almost its usual size, and there is but little hardness remaining.

CASE III.

June 26th. H. W., aged 20. Gonorrhœa two months. Four days ago the right testis began to swell, and is now the size of a hen's egg; not very tender except when pressed. Never had orchitis before. Strapped with soap plaster, and to have one drachm of cubebs three times a day.

30th. Gonorrhœa cured; testis much smaller, and hardness less.

July 4th. Cured.

CASE IV.

July 15th. E. M., aged 19. Gonorrhœa fourteen days. Orchitis of both sides. Twelve days ago the right testis became swelled, and has gradually increased in size, and is now as large as a goose egg, tender and painful; there is also tenderness and swelling of the cord. The testicle has been large since an attack of orchitis six months ago. Straps of adhesive plaster were applied.

16th. Much smaller and less painful. Restrapped.

24th. Almost well. The left is now swelled and painful.

25th. The left being larger, was strapped.

26th. Left testis better.

31st. Both well except slight induration of the right.

CASE V.

March 28th. J. M., aged 18, fell across an iron bar and injured the left testis, which has been swelled for a week. It is now about the size of a large hen's

egg, not very hard, and of a more oval form than in gonorrhœal orchitis. Strapped with adhesive plaster.

29th. Much better; straps very loose; re-applied.

31st. The testis is become quite soft, and of its natural size.

I would here observe, that this kind of orchitis (from injury,) gets well more speedily than when connected with gonorrhœal inflammation.

CASE VI.

J. D., aged 25, has had more or less gonorrhœa for two years, but no orchitis. Fourteen days ago the right testis became painful and swelled. Straps of adhesive plaster were tightly applied. In three days it was re-strapped, the scrotum, which was previously tense and inflamed, being now flaccid and free from tenderness. The testis after one more application returned to its usual size.

CASE VII.

June 16th. S. C., aged 30. Gonorrhœa one week. Never had orchitis before. Last evening the testis became tender and swelled, after using violent exercise. The urethral discharge is diminished; there is much pain along the cord, which is swelled. Straps of adhesive plaster were applied, and one drachm of cubebs given every six hours.

18th. Better; testis much smaller. Re-strapped; and after this, being quite easy, he walked a good deal. Pain then came on, and the strapping was immediately removed. Hot fomentations were constantly applied, as the pain became very violent. A little tincture of opium gave speedy relief.

19th. The testis less painful. To be supported by a suspensory.

28th. The testis almost well, but some degree of enlargement and hardness remains.

This case shows that if the compression gives pain and is immediately removed, the case goes on well.

The next case is one where I was not called in to see the patient for some time after he was seized with the severe symptoms which supervened; but I do not doubt that if I had seen him at once, and had immediately removed the strapping, the patient would have done as well as Case 7.

CASE VIII.

June 10th. J. F., aged 24. Gonorrhœa fourteen days. Orchitis six days. Testis the size of a duck's egg, very hard and painful; the cord very tender and swelled. Strapped with adhesive plaster.

12th. Better. Re-strapped.

15th. Better. Re-strapped. Walked a great deal. Some hours after the strapping had been applied, great pain came on, with considerable swelling of the cord, tenderness over the lower part of the abdomen, and pain in the loins. Vomiting, a quick feeble pulse, and cold extremities, were the severe symptoms which followed. Stimuli were given, æther and opium; the strapping removed, and hot fomentations constantly applied. He soon became easier, and progressed favourably.

27th. The testis very hard, but free from pain; in other respects well. (This state of the testis has become permanent.)

The above is the most severe case of the kind which will generally be met with; and I have adduced it to show what is the dark side of this mode of treatment. I do not, however, consider the symptoms to have been more severe than in some cases of orchitis where other treatment than strapping has been used; and often a blow on the testicle will cause the same symptoms.

At the time Case 1 applied to me, a neighbour of his came with the same disease; and, thinking it would be a good opportunity to test the different modes of treatment, I ordered him tartar emetic and calomel, with warm fomentations to the part. He got better in about ten days, but was obliged to use the Linimentum Hydrargyri cum Camphora, for some time before the induration and enlargement of the testis gave way.

A brother practitioner called me to see a case of orchitis, arising from a blow. The testis was very soft but of large size. Here leeches, calomel, and tartar emetic, were put in requisition, and after a week the patient was allowed to get up; and in a few weeks after the testis slowly diminished to nearly its natural size. In this case the probability is, that if strapping had been applied, the cure would have taken not more than a week, as in Case 5; but my friend thought the old mode of treatment better than the new. Since then he, as well as others, has been persuaded of the efficacy of compression in such cases.

Having already taken up far more space than I intended, I will finish these remarks by a few observations on the mode of treatment. It will be seen from the above cases, that we may apply the strapping at any time, from a few hours after the disease has appeared, to a fortnight, or even longer. It generally speedily relieves the pain, but some cases there are where, from violent exercise, or, perhaps, idiosyncrasy, the patient cannot bear the pressure. As a general rule, I should say, that if after the first quarter of an hour of the application, the patient should have much pain, and *increasing* in violence, the strapping should be temporarily removed. If the straps be applied uniformly, and tolerably firm, this will seldom be required. Much, of course, depends on the mode in which the operation is performed, for it is not so easily done as may be imagined; and it would be worth while for a surgeon to go some way to see it properly performed, which he will, most probably, at any large hospital. Care should be taken to place the first strip tightly round the cord, immediately above the testicle, and to continue the strips tightly downwards, with perpendicular ones also to give plenty of support. Soap or adhesive plaster is generally used at first; but in more chronic cases, the Emplastrum Hydrargyri cum Ammoniaco may be substituted.

It will generally be found that a few minutes after the strapping is properly applied the pain is relieved. In

a day or two the testis is so much diminished in size that the straps are very loose; they may then be re-applied once, twice, or thrice, according to the state of the case. I have seen a patient in the greatest agony before the application, and in an hour after the straps have been put on he has been able to walk about almost without pain.

The earlier the remedy is applied the less will be the induration remaining after the inflammatory stage has subsided.

Lastly, (and that not of the least consequence to the surgeon,) the patient will be delighted with the safe, speedy, and almost painless recovery from a very unpleasant disease, and will be grateful for the means of relief being used without discovering to his friends the nature of his malady. More especially will he value this simple and easy mode of treatment if he has unfortunately been the subject of the same disease before, and has had to submit to the nausea consequent on the use of emetic tartar, or the salivation caused by the calomel he has taken, as well as to the troublesome application of leeches and fomentations, to say nothing of the loss of time from being obliged to remain in bed or on a couch for days or even weeks.

Crewkerne, January 29, 1847.

ON SIMPLE ACUTE INFLAMMATION OF THE MEMBRANES OF THE BRAIN IN INFANTS.

By Dr. Rilliet, of Geneva.

(Translated for the Provincial Medical and Surgical Journal.)

I. Preliminary Observations.

A great number of practitioners, even in the present day, confound all the acute cerebral affections of infancy under the term *acute hydrocephalus*, or *tubercular meningitis*; and the error has continued, although many attempts to introduce a more strict pathology have been made, even as long since as the end of the last century.

Thus Hopfengartner, who wrote in 1802, has distinguished meningitis from acute hydrocephalus, and it is evident from the tenor of his observations, that under the former term he alludes to the same form of the disease which it is our object to illustrate in the present communication. "From the very onset of the disease," he observes, "and without any precursory symptoms, the children complain of pains in the head and abdomen; on the second day they keep their bed, and the disease proceeds without those remissions which we notice in acute hydrocephalus. The patients are dull, the eyelids close convulsively; the teeth are fixed, and deglutition is difficult. Constipation is not so obstinate as in hydrocephalus. There is in general little or no vomiting and the pulse is small and slow. Coma supervenes much more rapidly than in hydrocephalus. The patient usually dies about the fifth or sixth day. After death the membranes are found to be inflamed throughout their whole extent."

This description evidently refers to acute meningitis but the author has committed an error in stating that vomiting is absent, and that the pulse is feeble and slow; on the contrary, vomiting is very generally present, and the pulse though feeble, is not slow.

Coindet, while he admits that hydrocephalus is the result of a peculiar inflammation of the lining membrane of the ventricles, establishes a distinction between phrenitis and dropsy of the ventricles.

Matthey also separates the disease which he terms *hydro-meningitis*, from the water on the brain which follows scarlatina, and also from sub-acute hydrocephalus. This latter variety is that described by Whytt and corresponds to the tubercular meningitis of recent writers. The hydro-meningitis of Matthey offers on the contrary a close analogy with the disease in question Its characters as stated by Matthey are as follows:— "More or less headache, sickness, spasmodic movements of the limbs, brilliancy of the eyes, quiet delirium, contraction of the pupils, quick and small pulse, coma. After death, gelatinous effusion on the surface of the brain, seldom in the ventricles."

Jahn (*Analekten über Kinderkrankheiten*, 1835,) describes a form of disease similar to our acute meningitis under the denomination of *idiopathic encephalitis*. It is characterized by intense fever, with quick breathing, thirst, great susceptibility to light and noise, brilliancy of the eyes, frequent vomiting, obstinate costiveness, &c. The anatomical characters, as stated by the author, are:—

1. Injection of the brain and its membranes.
2. Induration of the cerebral substance.
3. Effusion of a greenish lymph in the anfractuosities of the brain, and along the course of the vessels.
4. Absence of serous effusion in the ventricles.

Evanson and Maunsel have also distinguished arachnitis of the convexity of the brain, from inflammation of the membranes at the base, and hydrocephalus. They observe:—"Infants are not exempt from arachnitis of the convexity of the brain, although this form of inflammation is less common than the preceding, (hydrocephalus and inflammation of the base.)" But we need not multiply quotations; those already adduced suffice to demonstrate that several writers have endeavoured to distinguish hydrocephalus from acute inflammation of the nervous centres.

From the time that the term hydrocephalus was exchanged for that of *meningitis*, confusion was re-established,—a confusion which was increased by the terminology. It was rational enough to distinguish hydrocephalus from meningitis; but what good could arise from making two forms of meningitis? Those who had written of the disease under this term, as Golis, Senn, Charpentier, &c., confounded both forms under the same description; but others, as Parent and Martinet, at once separated inflammation of the base from that of the convexity of the brain, and recognized the fact, that in infants the former was a far more common affection than the latter.

From the period at which the writings of MM. Papavoine and Rufz contributed so much to the elucidation of the true nature of acute hydrocephalus, the

epithet *tubercular* was added to the designation *meningitis;* it was thought that more precision was thus introduced into the diagnosis of the disease; but it was not so in truth, for MM. Piet, Green, &c., have almost entirely omitted the mention of simple *meningitis.* Rufz, however, does not deny the existence of this latter affection, though he admits its great comparative rarity; and before him M. Guersent (*Dict. de Méd.*, tom. xix., p. 410,) had distinguished the simple from the tubercular form of meningitis, although he referred to the former, as it appeared in adults, and in an epidemic form.

The first description of *simple acute* meningitis based upon clinical observation is undoubtedly due to the past labours of M. Barthez and myself. But it is strange, that even subsequently to the appearance of our memoir, MM. Deleseur, Barrier, and other talented writers on the diseases of early infancy, have entirely omitted to mention this variety of the disease. M. Deleseur has collected all the acute or subacute cerebral affections of childhood, under the generic term *meningo-encephalitis*, and scarcely even endeavours to distinguish between simple and tubercular meningitis. Trousseau gives the name of *cerebral fever* to all cerebral inflammations indiscriminately. Bouchut and Barrier refer the reader to the tubercular form of the disease, apparently believing that no advantage is to be derived by separating it from simple meningitis.

We do not hesitate to differ entirely from the authors above cited, and to express our belief that their doctrines have been the cause of the greatest confusion. We are far from insisting upon frivolous distinctions, but there are, nevertheless, certain laws which the pathologist cannot transgress, without the risk of falling into error and confusion.

We have already shewn, (*Traité des Maladies des Enfans* tom. iii. p. 518.) and shall again satisfactorily prove, that simple *(franche)* meningitis, and tubercular meningitis differ essentially. Their causes are not alike. They attack children under different circumstances; they have neither the same modes of origin, progress, or termination; their anatomical characters are different, and the treatment likewise is to a certain extent different. If these points are not sufficient to establish their distinction, there is no use in nosological arrangements; our own opinion is that true meningitis is as distinct from tubercular meningitis, as pneumonia is from phthisis pulmonalis.

Before we enter into the more immediate subject of our present communication, it will be useful to make a few observations upon a point upon which we fear that we have been misapprehended in our former writings. In our opinion, meningitis developing itself in a tubercular subject, is always *tubercular* meningitis, whether we find granulations in the pia mater, or whether we do not. Tubercular meningitis, therefore, and the meningitis of the tuberculous, are, to us, one and the same malady, and for these reasons:—

1. In both, the seat of disease is at the base of the brain.

2. Both consist of a thickening of the pia mater with false membranes or purulent exudation.

3. Both are accompanied by effusion into the ventricles, and frequently co-exist with cerebral tubercles.

4. Both co-exist with tubercular deposits in other organs.

On the contrary, in true meningitis, it is the pia mater and arachnoid of the convexity, or of the ventricles, which are inflamed and infiltrated; serous effusion into the ventricles is the exception, and the affection does not coincide with tubercles or granulations, either in the brain or other organs. These differences are so marked, that if the brain of an infant be presented to us, with the fissure of Sylvius filled with adhesive exudation, and the base covered by membranous and purulent deposit, the convexity at the same time being free from inflammation, we do not hesitate to predict that there are most probably also granulations in the membranes and serous effusion into the ventricles, and that tubercles will certainly be found either in the lungs or bronchial glands.

Again, we are able to tell from the nature and number of the tubercles present in the chest or abdomen, what has been the character of the cerebral affection. Thus if we learn that miliary granulations have been found in considerable abundance in the lungs and other organs, we can affirm that the acute symptoms of the head affection have been preceded by precursory symptoms, that the onset of the disease has been insidious, that the inflammation of the membranes was ushered in by vomiting, that there was constipation with but little fever, and that the malady has lasted two or three weeks. On the other hand, if the brain of an infant be exhibited to us, the convexity of which is covered with false membranes or purulent exudation, we do not hesitate to assert that no tubercles will be found either in the membranes of the brain or elsewhere; that the disease has set in suddenly and with violence, with convulsions perhaps, if the infant be very young; with violent headache, constipations, and vomitings if it is of more advanced age; that delirium has been violent, and that the duration of the disease has not been longer than three, four, or six days.

We shall revert to this subject in our article on diagnosis, and shall then enter further into details respecting the differences between the two forms of the disease.

II. Morbid Anatomy.

Great familiarity with pathological anatomy is necessary for the appreciation of the slight lesions which frequently constitute the morbid appearances left by tubercular meningitis; but it is far more easy to recognize the results of true meningitis of the convexity. Scarcely, in fact, is the injected dura mater divided, than a greater or less extent of the convexity of the two hemispheres is seen to be covered with a layer of yellow or yellowish green exudation. The deposit extends also to the internal aspect of the hemispheres, the upper surface of the cerebellum, and sometimes to the base of the brain. A slight examination is sufficient to demonstrate that the deposit consists of liquid pus, and that its seat is always the pia mater, and sometimes also the arachnoid cavity. The products of inflammation deserve to be separately studied in these two situations.

1. *In the arachnoid.*—This membrane, although it contains the products of inflammation, may itself not exhibit any trace of that process; but in general retains its smooth and polished appearance. If life has been prolonged to the sixth or seventh day, the pus loses its fluidity, and acquires such consistence as to resemble a false membrane; in other cases true false membranes are formed in addition to the fluid products. These partake of the yellow colour of the pus,—are thin, soft, and seldom very extensive; they are always easily detached from the serous membrane, unless as is occasionally seen, organization has commenced.

2. *Pia mater.*—Alterations similar to the above are discovered also in the pia mater, especially in patients who have died on the fourth or fifth day. The pus, when liquid, may be made to pass over the surface of the membrane by pressure with the finger, but it subsequently becomes concrete, forming a flat broad layer of variable thickness, and which passes down into the sulci. The membrane appears to be puffed up by the secretion, and is increased both in thickness and tenacity. The deposit of pus is always more copious along the sides of the blood-vessels, and in the interstices of the convolutions, than elsewhere. At the base the pia mater is often quite healthy. Over the surface occupied by the pus, the membrane is finely injected, and is readily detached from the surface of the brain.

3. *Cerebral substance.*—The brain is firm, sometimes preternaturally so. The grey substance is of a normal colour if death has occurred before the fifth day; later it may also be nearly unaltered, but it is more generally of a vivid rose colour, and the medullary portion exhibits numerous bloody points. The most superficial layer of the convolutions is sometimes softened, so that portions of it are removed along with the pia mater. In very young infants, the brain is sometimes softened throughout, an appearance which is probably due to œdema of its tissues. The condition of the brain in subjects who have speedily succumbed, shows plainly that inflammation of the membranes is the initiatory lesion, and the cerebral pulp becomes involved subsequently.

4. *Ventricles.*—As a general rule, the ventricles are found empty, or containing only a teaspoonful or two of purulent serosity. The exception to this occurs in very young infants. In some cases the lining membrane and the plexus choroides exhibit traces of inflammation, being injected and softened, or subsequently pale, but thickened and opaque. The central portions of the brain in some cases, preserve their consistence; in others they are softened, or converted into a diffluent pulp. The latter case chiefly occurs in young infants, in connection with copious serous effusion into the ventricles; but it is occasionally seen without this, and must then be attributed to inflammatory action, and not to maceration, as may be the case when the effusion is in large quantity.

To recapitulate:—The anatomical characters vary according to,—1st, the duration of the malady; 2nd, the age of the patient; 3rd, the seat of the inflammation.

1. In cases which prove fatal before the fifth day, we find the pus fluid or semi-fluid, or false membranes in the arachnoid and pia mater, the latter being vividly injected, but not adherent to the surface of the brain. Later we in general discover only concrete pus or false membranes; the pia mater is less injected, and the surface of the convolutions is sometimes soft and reddened. In some instances the ventricular portion of the arachnoid is inflamed, and the cavity contains a small quantity of purulent serosity, but never pure serum.

2. In very young infants, the brain is often softened universally; the ventricles contain a large quantity of serosity, and there is also occasionally a sub-arachnoid serous effusion.

3. General meningitis is the most common form of the disease; next, meningitis of the convexity; that of the base and ventricles, is much more rare.

(*To be continued.*)

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF WILLIAM SANDS COX, ESQ.

By Peter Hinckes Bird, one of the Resident Medical Officers.

(*Continued from page* 128.)

Case XXV.

FISTULA IN ANO.

William Wilson, aged 38, shoemaker, of full plethoric habit, admitted into the Queen's Hospital, under the care of Mr. Sands Cox, on July 21st, 1846. He states that in June, 1845, he first perceived a small swelling, with circumscribed hardness, on the verge of the anus, it caused him much pain and inconvenience, which gradually increased, so that in September following he was unable to sit down. In December this small swelling "came to a head," which broke and discharged a thin matter; it kept getting worse until January, 1846, when it was about an inch and a half deep; it was then laid open by the medical man attending him. Another formed by the side of it, and it was again laid open, but without success. He states that these openings have bled at times. His health has always been good; no tendeney to phthisis can be traced in the family; his father died of apoplexy; his mother is alive and well; his occupation is a sedentary one; in his early life he was rather "a free liver;" his bowels have always been exceedingly regular; is seldom troubled with cough; has never been subject to hæmorrhoids.

Present state.—There are two fistulous openings, one on the left side, the other on the right side of the anus. The one on the right side has but lately appeared, it is about an inch and a half deep, situated about half an inch from the anus, and communicates with the rectum; the other, which has been present since last September, is situated on the verge of the anus, and is

rather deeper than the former, and also communicates with the rectum; it discharges a thickish matter; he cannot sit upright on a hard bench; bowels reported regular; appetite good; tongue rather coated; pulse natural. It has been dressed lately with dry lint; the margins of the openings appear red and inflamed. Ordered to have a poultice applied.

24th. Much the same; the openings discharge freely into the poultice.

August 5th. Both sinuses were laid open this morning by Mr. Cox, a silver director being introduced into the sinuses, and then into the rectum, through the internal opening. The director being bent, all the soft parts lying over it were divided by a sharp-pointed curved bistoury. He lost a small quantity of blood, but bore the operation well. Ordered to have it dressed from the bottom with dry lint.

12th. The openings are healing up, they look healthy; general health good; bowels open.

20th. The openings are not so deep, have an healthy appearance; bowels regular.

September 1st. Improving rapidly.

16th. Quite well. Discharged cured.

The preceding case presents an instance of complete fistula in the anus, which is not such a frequent form of this disease as that in which the abscess has only an external opening, (blind external fistula,) and does not perforate the rectum at all, from which, indeed, the matter is more or less distant.

Abscesses near the rectum happen with particular frequency in persons who are habitually costive, and according to Sir B. Brodie, in those who have been troubled with piles; they have also been produced by foreign bodies penetrating through the mucous membrane of the bowel and sphincter muscle into the cellular tissue. The pathology of these cases of complete fistula is exceedingly interesting; an indurated stool, a foreign body (a fish-bone or an apple-pip, for instance,) in its course through the rectum, produces solution of the continuity of the coats of the rectum, and into this small wound either the fæces or the foreign body enters, and excites inflammation, followed by suppuration, which is kept up by the presence of the foreign body; this gradually progresses until a fistula is formed by the abscess breaking on the integument on the verge of the anus. According to M. Ribes,* when the abscess communicates with the bowel, the orifice is *always* within five or six lines above the junction of the internal membrane of the bowel with the external skin. Abscesses near the rectum have a great tendency to form fistulous openings.

Sir B. Brodie* admits with Pott that abscesses near the rectum after discharging themselves sometimes heal up like others. This, however, he considers as an exception to the general rule.

In the majority of cases, if nothing be done, the opening will continue, sometimes discharging little, sometimes much, or it will discharge and break alternately. The reason why abscesses near the rectum heal up less frequently than others, is referred by Sir B. Brodie to the sinus or passage for the matter running through the sphincter ani muscle; this muscle is constantly in motion, contracting and dilating, and consequently there is not the repose which is necessary for the cure of the abscess.

Abscess near the rectum frequently occurs in patients who are labouring under abscesses or tubercles in the lungs. Hence Sir B. Brodie properly recommends surgeons, before they operate on a patient for fistula, to ascertain whether the lungs are sound. He observes, "Persons with diseased liver and other visceral diseases, are also liable to the formation of these abscesses. The distinction of these cases from others which occur in otherwise healthy subjects, is very important, inasmuch as the practice which is proper in the one case is quite improper in the other." He adds, that if the patient labours under visceral disease, it is seldom that the abscess will heal, but if it should, the visceral disease will make increased progress, and the patient will die sooner if the operation be performed than if it were let alone.

In this operation the intention is to divide the intestine from the verge of the anus, up as high as the top of the hollow in which the matter was formed, so that the two cavities of the gut and fistula are made into one, and a firm and lasting cure is obtained, instead of a hollow or sinuous sore, which serves for the lodgement of matter. The operation is effectual, however, on another principle—viz., the fibres of the sphincter between the abscess and the bowel are divided, and the sphincter muscle being thus set at liberty, there is not only a free and ready escape for the matter, but the action of the muscle, which prevents the healing of the abscess, is put an end to. In these cases every sinus must be laid open. The dressings should be soft, easy, and light, the whole intent of these being to produce such suppuration as may soften the parts, and bring them into a state fit for healing. Sir B. Brodie states that it is chiefly in consequence of too much lint in dressing that farther operations are so frequently wanted before the cure is completed. The daily dressing should be repeated until the cut surfaces are cicatrized, but no longer. The cicatrization of the bottom of the sinus will be completed better without the dressing than with it.

* Recherches sur la situation de l'orifice interne de la Fistule de l'Anus. 1820.

* *London Medical Gazette*, 1837.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, MARCH 24, 1847.

It has been well remarked by Dugald Stewart, that "the chief part of a philosopher's life must be spent in unlearning the errors of the crowd." The remark applies with peculiar force to the medical philosopher, and every thinking practitioner cannot but have observed that in the taken-for-granted effect of remedies, there is nearly as much to unlearn as to

learn; while the advancement of medical science must ultimately depend upon the judgment exercised by its professors, as well in the detecting of errors, as in tracing effects to their real causes.

The leading principles of treatment now generally admitted by the profession are tried principles, not to be set aside by the vagaries of weak minds, nor the superficial objections of half-educated innovators. Our present object is not to bring these principles for a thousandth time under critical review, but to throw out a few hints which may assist in the more rigid and vigilant application of them to particular cases. There are few, if any, among us who are sufficiently alive to the danger of drawing false practical conclusions from the phenomena constantly passing under observation. The science of medicine is so complicated,—the ever-varying phases of disease are under the influence of so many contingencies of climate, temperament, diet, regimen, mental excitement, and other circumstances, that he must possess a mind of no common order, who can grasp and weigh them all. It is much, that in the midst of so many difficulties, we should have attained to so much harmony, as regards great principles; and yet more, that for a century, at the least, all the great, the learned, and the enlightened among us, have, through various channels, and sometimes in spite of opposing theories, deduced from these principles, the same practical lessons.

The general agreement of leading minds on leading points, though not amounting to absolute authority in medical matters, may be regarded as light in the darkness,—as lucid points which, without prostrating the judgment, may serve to direct the researches of those enquiring after truth. Not one of these accredited principles can, it is true, be established as infallibly correct; yet no sensible man would feel himself justified in treating them with contempt, or rejecting them without years of patient and laborious examination. Many of them have passed unscathed, if not unchallenged, from the days of Hippocrates till now; and a flippant disturber of these settled points must be very ready with his pleadings, if he would escape universal contempt. Nevertheless, the field is always open; diseases still exist, terrible and fatal, which defy the best resources of our art; and cases of daily occurrence, not formidable in their original character, become serious, and sometimes fatal, in their issue, baffling the skill and disappointing the diagnosis of our most careful practitioners. Learners, and docile learners too, the members of our toilsome and intricate craft, must ever remain: dogmatism ill becomes those who have yet so much to learn.

A proposal for the investigation of subjects of inquiry on which information is required, was some months back suggested by an intelligent correspondent,* which, if cordially and generally responded to, *must* effect something. On the other hand, should any considerable number of the members refuse their co-operation, on the ground that the object sought to be attained cannot be fully and satisfactorily carried out, then the proposal referred to, or any other requiring the co-operation of numbers, must partially at least fail. In the hope that members will feel themselves called upon to lend their aid to a work of this nature, which, if it succeeds, cannot fail to advance our individual practical knowledge, a series of questions will shortly be addressed to each member, touching his professional experience on various practical subjects. It is not intended to ask for opinions, much as in some quarters they may be entitled to respect. It is to be feared that some of us may have set down in our own minds as facts or truths, inferences only, not always perhaps correctly drawn from facts, or drawn from appearances, mistaken for facts,—in both cases fallacious and erroneous. It is proposed, therefore, to ask for facts,—facts carefully observed, but wholly unincumbered with inferences; and it is scarcely necessary to remark, that a record of naked, well-attested facts, arranged in an orderly method, must be of some private service to each individual member, even if they be collected only by himself; but when multiplied by the whole number of our members, who among us would not hail the statistical result as a guide to his own practice, as a corrective of any erroneous opinions formed on too narrow a scale of observation, and, to the younger members especially, as a remedy for early prepossessions or prejudices.

With *opinions* we have no wish to interefere: we have no right to challenge them. Fallible ourselves, we must in this respect bear with each others errors and infirmities; but as members of a liberal profession, we claim a right to a reciprocal communication of physical facts. They are our common property: their value to each one of us becomes enhanced by their publication for the use of all. Unlike the pretended arcana of the empiric, the discoveries of the qualified practitioner enrich their possessor in proportion to the extent wherewith he shares them with his brethren. The genuine physician has no reserves,—no mysteries, no dealings with occult influences. He rejoices with others in their success in the alleviation of human suffering. He knows how to "give

* *Provincial Medical and Surgical Journal*, July 8th, 1846, p. 311.

honour to whom honour is due." To him is reserved the high prerogative of trying the gold in the fire and circulating the pure metal for the general good. To the honour of the medical profession be it spoken, neither the fame nor the emolument of its members is secured by "Royal letters patent." Their midnight oil burns for their brethren as for themselves, and through them for all mankind. In them is literally fulfilled the proverb,—"there is that scattereth and yet increaseth"

That the fountains of our science may be rendered yet more pure, and better adapted to the dignified purposes of our art, the following observations are submitted to the consideration of the readers of the *Provincial Journal*:—

1. The effects resulting from the medical treatment of disease seldom or never admit of absolute demonstration.

2. Nevertheless, the highest degree of probability which the subject will admit of, may be fairly taken for demonstration, and acted upon with confidence.

3. The barest probability must occasionally determine our practice, when better evidence is wanting; but extreme vigilance should be exercised.

4. Established opinions are worthy of respect, not only as the opinions of the most distinguished men, but as having become established, in a high degree of probability, on the best grounds.

5. The most judicious medical treatment is founded generally on established opinions, and for this reason it usually comprises a variety of agents; hence there is little to be learned from it. If it succeed, it is impossible to determine, *from the facts of the case*, to which agent success is chiefly due; if it fail, the cause of failure is equally obscure. This remark applies in some degree to nineteen out of every twenty cases which come under treatment. Hence the slow progress of medical science. We learn nothing with certainty from the great mass of our cases, especially if our practice be careful and discreet.

6. It follows (from proposition 5,) that those diseases afford the best opportunities for increasing our therapeutical knowledge, which are generally held to be intractable or incurable, inasmuch as established treatment having failed, we are not bound to put it into practice. The learner also derives a farther advantage from these cases; the *vis-medicatrix naturæ* being inert or insufficient, recovery, when it occurs, may fairly be attributed to medical agency. Here also some new method of treatment, founded upon analogy, may fairly be tried.

7. The new method should be simple and defined, consisting, if possible, of one remedy alone, used under circumstances favourable for its exhibition, and so administered, as to show—1st, the effects of an over-dose; 2nd, the state of the disease under this over-dose; 3rd, the state of the disease under the maximum dose; 4th, the *actual operation* of the remedy on the morbid action, proved by its recession under the medicine, and its advance under its discontinuance. These experiments (the results having been ascertained in one case, or under one set of conditions,) should be tried under every possible variety of circumstances, with and without other adjuvants;—in every variety of cases, acute, chronic, recent, advanced;—at all ages, and in either sex;—in hospitals, in dispensaries, and in private practice;—in cities, in the country;—in inland districts, and at the sea side;—in damp situations, and in dry;—in winter, and in summer;—in spring, and in autumn. The symptoms in each case should be carefully noted while the patient is under examination, and as carefully entered in a well-adjusted, well-indexed notebook, ready for reference at all times.

8. If every intelligent and observant practitioner were to try one remedy on the plan above detailed, so far as his position rendered it possible, and during his whole life direct his especial attention to the operation of that remedy in any incurable disease, or class of diseases, to which it might on any rational analogy appear adapted, his life would yet be too short to work the problem fully, and he would still leave much to be accomplished; but the results of his own researches would necessarily be very instructive, and an instalment of no mean value would be paid into the treasury of science. The separate facts deduced from his experience, when duly arranged and digested, would produce in his own mind results not absolutely demonstrative possibly, but yet so conclusive as to approach as near to the confines of fixed and settled truth as is attainable in a mixed and applied science like that of medicine.

In conclusion we would commend this method to the consideration of the members of the Provincial Association,—to the sober-minded, quiet, thoughtful, practitioners of the provinces,—and especially to those who wish to distinguish themselves by really benefitting their fellow-men.

Review.

A Manual of the Principles and Practice of Ophthalmic Medicine and Surgery. By T. Wharton Jones, F.R.S. London: Churchill. Fcap. 8vo., pp. 570.

It is curious to refer to the older writers upon ophthalmic surgery, and to see what strange treatment was adopted by them. A favourite remedy, even during the early part of the last century, was the placing of

"a lowse" in the eye, which, as Richard Banister, Master in Chirurgery, quaintly observes, "tickleth and pricketh, so that it maketh the eye moist and rumaticke, and quickeneth the spirits." We may doubt, however, whether it added much to the comfort of the patient so favoured. Others scrubbed the conjunctiva with the sharp beards of rye in cases of ophthalmia. And friction on the cornea with a gold ring was considered a sovereign remedy for opacity. We may reasonably suppose that this was a frequent consequence of the two first-mentioned applications; and pounded glass blown into the eye enjoyed a high reputation for rubbing it off again. The wonder is that any eyes recovered. Our forefathers must have had but an indifferent time of it when they laboured under the double affliction of bad eyes, and worse oculists. Sore must have been the struggle on the part of persecuted nature, to resist the combined onslaught of disease and the doctors. Happily for suffering humanity, a great change has been wrought of late years. Just and enlightened views gradually succeeded to profound ignorance, and eye-diseases were rescued from the hands of those "proud quack-salving mountebanks" (as Banister calls them,) under whose dominion they had been so long suffered to remain. It was reserved, however, for the present century to see ophthalmic surgery assume its legitimate position in medical science; a fact of more importance than may at first sight appear.

It is not only the sufferers, but the public at large, who have a direct interest in the prevention of blindness. Great as this calamity is to the individual whose circumstances enable him to bring within his reach the luxuries of wealth, and who can soothe his affliction by intellectual resources, bodily enjoyments, or agreeable society, the misfortune is far heavier when it befalls the poor man, upon whose exertions a family are dependent for their bread. In that case poverty soon aggravates the misery of darkness; the means of subsistence being withdrawn, the sufferer and his family are thrown upon casual charity for support, or are driven to that last resource of the wretched—the workhouse. It is then of the highest importance that diseases of the eye should have brought to bear upon them all the advantages that science, observation, and experience can afford. It is gratifying to observe that the medical profession generally is becoming daily more familiar with a class of diseases yielding in importance to none, but until recently we fear too much neglected.

The object of the author of the volume before us, has been, (he informs us,) "to produce a work on the diseases of the eye, which should serve at once as a text-book for students, and as a book of reference for practitioners." He commences very properly, by giving directions for examining the eye and its appendages, and for the employment of remedial applications. After a description of the phenomena of inflammation in general, ophthalmic inflammations in particular are considered. Mr. Jones divides the ophthalmiæ into orders and genera as follows:—

Order I. *Ophthalmia externa*, comprehends conjunctivitis, sclerotitis, corneitis, and compound external ophthalmia—that is, the catarrhal form modified by struma and rheumatism.

Order II. *Ophthalmia interna anterior*, comprises aquo-capsulitis, iritis, and crystallino-capsulitis anterior.

Orders III. and IV. embrace ophthalmia interna posterior, and panophthalmitis, (inflammation of the globe.)

When upon the subject of choroiditis, the author remarks, that "the anatomical characters of the inflammations of the choroid and retina cannot be directly observed during life; even the external redness of congestion proper to them cannot be seen, for, different from the structures hitherto considered, the blood-vessels of those under notice enter the eyeball at its posterior part."

The prognosis given of gonorrhœal ophthalmia, that formidable disease requiring such bold and energetic treatment, is, "until, with a cornea safe, or at least not much ulcerated, the disease is on the decline, which is known by the subsidence of the swelling of the eyelids and of the chemosis, with diminution of the discharge, the prognosis must be extremely unfavourable. The eye may be destroyed in forty-eight hours, from the commencement of the disease."

To the account of the ophthalmiæ, succeeds the description of the various morbid states of the eye consequent upon them; as granular conjunctiva, staphyloma, &c. The third chapter is devoted to dropsies, tumours, cancer, &c., of the eye-ball; and to the consideration of cataract and artificial pupil. The various operations are fully discussed, and the descriptions illustrated by numerous wood-cuts; indeed expense has not been spared in introducing figures whenever the subject could be elucidated by them. Mr. Jones then treats in succession, of optical defects, amaurotic affections, and strabismus. Diseases of the eyelids, of the lachrymal organs, and of the orbit, follow in order; and the conclusion of the volume is devoted to injuries of the eye and its appendages.

When treating of diseases of the eyelids, the author thus describes a morbid condition of those appendages, comparatively harmless if let alone, but often roused into malignant activity by injudicious interference, and irritating applications. "Scirrhoid callosity of the eyelids, a hard tuberculated warty-like degeneration of the whole thickness of the eyelid, commonly the lower, at the tarsal border to a greater or less extent, traversed by varicose vessels, and ending in ulceration, sometimes occurs, especially in old people. Though resembling, it is not of the nature of scirrhus."

We may here remark, that much caution ought to

be exercised before meddling with the indolent warty growths often found upon the faces of elderly people. If let alone they are perfectly innocuous; but several instances have fallen under our observation of very serious mischief resulting from the application of caustics. The growth has returned again and again, after repeated cauterization, each time worse than before, until that which was a harmless pimple has been converted into an extensive, unsightly, and intractable disease.

Our opinion of the work before us is, that it bears evidence of extensive reading, and considerable research; but the author must forgive us if we object to the *style*, as being unusually hard and involved. The complication of some of the sentences renders close attention necessary to understand their meaning. The wear and tear of body and mind, inseparable from extensive practice—especially country practice—often disinclines medical men to labourious study; to them it is no trifling recommendation that a book should be written in clear, perspicuous, and readable language.

"Est brevitate opus, ut currat sententia, neu se
"Impediat verbis lassas onerantibus aures."—

The style we would prefer is perfectly compatible with scientific information; it materially enhances the interest of a book, and has imparted additional grace to the productions of some of the ablest writers of the age.

Proceedings of Societies.

SHEFFIELD MEDICAL SOCIETY.

Sixth Session.—Eighth Meeting, January 7th, 1847.
The President, Mr. TURTON, in the chair.

PNEUMONIA: DISEASED KIDNEY.

Mr. Law exhibited the left lung and kidneys of a patient, aged 38, who had died a few hours after admission into the Infirmary, seven weeks after delivery. The lung was a well-marked specimen of pneumonia in its third stage, the infiltration of pus being general, with several small collections in the form of vomicæ. A portion of the right lung was also found hepatized. The kidneys viewed together presented a singular appearance, one being natural in appearance, the other extremely pale and exsanguine. It is to be regretted that no history could be obtained with respect to this woman.

TUBERCULAR PHTHISIS.

Dr. Branson exhibited the lower portion of the ileum and upper part of the left lung of a table-knife cutler, aged 56, who was admitted into the Infirmary in the last stage of phthisis; the patient had also suffered from long-continued diarrhœa. Peyer's glands were extensively and deeply ulcerated. The apex of the left lung was occupied with a mass of India-rubber-like substance, very similar to that frequently met with in the lungs of grinders; this mass was studded with tubercles, and in the centre of it was a small tubercular cavity; the right lung afforded a good specimen of tubercular infiltration.

Mr. Law exhibited Ellis's apparatus for the treatment of fractures of the clavicle.

A gentleman introduced by the President exhibited specimens of Markwick's *piline* and *spongio-piline*, as a substitute for poultices.

CARCINOMA OF THE HEART.

Mr. Law read a paper on the habitudes of cancer, in which he detailed the subjoined case of scirrhous heart:—All the known habitudes of cancer were stated, and an opinion expressed, that the teeth were never attacked by it; the writer referring to a case in which a large portion of each jaw was destroyed, and the teeth escaped. As the disease destroyed the alveolar processes, the teeth fell out, or they were found imbedded in the soft parts, but they were perfectly sound. This was a strong argument against the doctrine still held by some that the teeth possess vitality.

H. G———, aged 39, of Harvest Lane, a table-blade grinder, was admitted an out-patient of the Infirmary, October 16th, 1846, and an in-patient on the 13th November. He died in an extremely anœmic condition, apparently of apnœa, on the 2nd December. His height was five feet four inches. When in health he weighed eight stone four pounds, and had a fair and clear complexion. He married in his 22nd year. His father dying, and his mother abandoning him in his seventh year, he was brought up as a parish apprentice, and experienced great hardships, being badly fed and clothed, and exposed to cold during the winter days and nights. From his 21st to his 32nd or 33rd year he got drunk nearly every night; but during the last seven years he was a teetotaller, and kept his pledge. His health, however, was pretty good until his last year, at the commencement of which he had an abscess behind the right ear. This opened naturally and soon healed, but he was never well afterwards, always complaining of pain in his chest, particularly the left side of the chest, and head; he soon became unable to work at his trade, and was latterly employed as a table-knife buffer, having laid aside the more laborious occupation of grinding. The medical history of his family is not known to his widow, she could not say that any of his relatives had had cancer. For the last three months the pain in the head and left side of the chest was worse, and he seemed quite unable to lie on his left side. He complained very much of his tongue, and refused all food requiring to be chewed. He had very distressing dyspnœa, which was least troublesome when he lay on his right side; and he was troubled with a constant tickling cough, with scanty expectoration. When he became an in-patient there was scirrhous ulceration of the tongue, he articulated very imperfectly, and the countenance was in the highest degree expressive of the cancerous diathesis.

It was easy to surmise that the dyspnœa depended on a mechanical cause, and the condition of the tongue, with the expression of the countenance, left little room for doubting that this mechanical cause was a scirrhous tumour or tumours, compressing the bronchi. It was obvious that death would speedily terminate his sufferings, and it was judged right to do nothing in the way of treatment farther than to administer stimulants and

liquid nutriment, with a view of sustaining the rapidly failing strength, and opium, with the view of allaying pain. It is much to be regretted that the chest of this patient was not examined with the stethoscope.

The heart was small, and weighed seven ounces and a half; there was very great concentric hypertrophy of the left ventricle, the cavity being only large enough to contain the thumb, while the walls were nearly an inch thick; the aorta was small proportionately to the size of the ventricle; the right ventricle also was small; the valves, especially the mitral, were somewhat thicker and less transparent than natural, but there seemed to be no reason to doubt that they had performed their function to the last. In the anterior wall of the right ventricle, near the base of the organ, there existed a large hard inelastic tumour, of the form of a flattened sphere, an inch and a half in diameter, and three quarters of an inch thick at the centre; the tumour next in size was as large as a field-bean, and situated in the anterior part of the wall of the left ventricle, also near the base of that organ; there were several smaller scirrhous masses, some connected with the left, and others with the right ventricle. In the apex of the right lung was a large scirrhous tumour, the size of a hen's egg; the lower lobe of the left lung presented the infiltrated form of the disease, in which form it also existed in the right clavicle, which was almost divided near the sternum by the cancerous deposition. The bronchial glands were one mass of scirrhus, and had, it was conjectured, occasioned the fatal apnœa. The autopsia was made under unusual difficulties, permission being given only for an examination of the upper part of the chest. The abdominal viscera, however, inspected by cutting through the diaphragm, were found healthy. The brain and spinal cord were not examined. The lungs and clavicle exhibited scirrhous formation, and with the heart, were exhibited to the Society.

With respect to the cause of extraordinary development of cancer in this patient, Mr. Law advanced nothing demanding particular attention; he left his hearers to form their own opinion as to the effect on the constitution of the man, of that sudden and total abandonment of intoxicating drinks, which was made in his 32nd or 33rd year, and persisted in to the last, for taking brandy in the way of medicine was no violation of his pledge. Mr. Law considered it idle to talk of the extension of the cancerous diathesis to the heart; but supposing this diathesis to have formed an original part of his constitution, then the whole life of the patient, as herein detailed, may have been a powerful exciting cause of the disease, as indeed it might have been of any other lesion. When the reader discovered the scirrhous heart, he had an impression that few medical practitioners had ever seen this organ similarly affected; he had since conversed with many medical gentlemen, and could not find that a similar case had occurred in Sheffield; but as the condition of the heart of H. G——— would never have been known without the *post-mortem* examination, so it is evident, since the majority of dead bodies are never examined, that cases may have occurred which were never detected.

Dr. Walshe says, (page 368,) "Cancer of the heart is not so excessively uncommon as is generally imagined; six of 8289 deaths are ascribed in the Paris registers to this organ, a higher quota than that supplied by several structures in which cancerous disease is familiarly known. I have had no great difficulty in bringing together twenty five cases, scattered through various works and journals; but the almost invariable deficiency of clinical narratives is deeply to be lamented." Fourteen of Dr. Walshe's twenty-five cases were examples of encephaloid, and perhaps only four of scirrhus. This point is not very clear. At page 370 Dr. Walshe says that cancer is but little disposed to attack the heart. The systematic works on medicine and surgery are for the most part silent respecting cancer of the heart, and neither Dr. Walshe nor Dr. Latham mention it. In Dr. Fletcher's "Elements of General Pathology," edited by Drs. Drysdale and Russell, p. 231, the following passage occurs:—"According to Meckle, a true scirrhus always begins in mucous or sebaceous follicles. Exceptions however, occur, although these perhaps are more frequently merely indurations; however, they are explicitly stated to arise in the heart by Cruveilhier, Ollivier, Bayle, and Andral. They occur chiefly on the right side in the membrane which is continued from the veins." In the case of H. G——— the scirrhus was developed in the muscular substance, and was unconnected either with mucous follicles, or with the membrane which is continued from the veins, although the endocardium, it should have been stated, was raised into a pouch on the right side of the heart, directly under the largest of the scirrhous tumours. The pouch was filled with cheesy-looking matter.

Dr. Hope, at page 355, cites cases of cancer of the heart. He does not appear to have seen the disease, except one case of cerebriform cancer, and nothing can be more meagre than his statements on the subject. Dr. C. J. B. Williams, on "Diseases of the Chest," p. 279, says,—"Malignant disease rarely affects the heart. A few instances are recorded by French authors. I have seen the septum to a great extent converted into a tough medullary substance, with a nodulated surface, which seemed to me of a carcinomatous character. The patient had died suddenly." Dr. Swaine, in a note to his translation of Hasse, says,—"I have myself met with ulcerous medullary fungus, occupying the septum which divides the two auricles, and discharging into the left auricle." According to Bouillaud, M. Carcasonne (Mem. de la Societé Royale de Médecine, 1777 to 1778,) was the first to describe cancer of the heart, though there is a case described in the same work for the preceding year, (1776.) One of these is alluded to by Dr. Hope; but Bouillaud, without assigning reason, is inclined to doubt their accuracy. Recamier, Rullier, Cruveilhier, Ferras, Andral, Bayle, Trelah, Velpeau, Laennec, Ollivier, Billard, Bouillaud, and Bertin, have all described cancer of the heart. In Velpeau's case the heart contained a dozen cancerous masses of different sizes, the largest not exceeding the size of a pigeon's egg. Billard's patient was only three days old. The case is given in his work on new-born infants. Only two cases occur in Dr. Hodgkin's

"Catalogue of Guy's Hospital Museum," (1829.) In the new catalogue of the St. Bartholomew's Hospital museum, there are three cases of medullary cancer of the heart, two of melanosis, and none of scirrhus. The *Lancet* for November 21st, 1846, contains the report of a meeting of the Royal Medical and Chirurgical Society, held November 10th. At this meeting two remarkable cases of encephaloid disease of the heart were detailed at length by Mr. Prescot Hewett. In one of these cases, the tumour proceeding from the appendix filled the right auricle, and extended into the ventricle. In the other case, the auricular surface of the mitral valve was extensively covered by a soft deposit, which, examined by the microscope, presented some large nucleated, but no caudate, cells. This patient, a female, fifty-nine years of age, was admitted for encephaloid of the breast, which was not removed; the other, for encephaloid of the foot, (resembling the disease of the heart,) for which his leg was amputated.

It appears probable that cancer never primarily affects the heart; at all events, the disease is very seldom limited to that organ. Dr. Walshe has collected only two cases of solitary cancer of the heart, and he thinks that one of them is open to objection. It may occur in association with cancer of any other part. Hasse (Pathological Anatomy, p. 107, by Swaine,) has this passage:—"A few scattered examples of medullary tumours, found growing with a pedicle from the inner surface of the heart, without any co-existing trace of disease elsewhere, shows that that organ may be the primary seat of the morbid development."

Mr. Law, in conclusion, acknowledged his obligations to Mr. Overend, who had given him the opportunity of bringing the case before the Society. In the discussion which ensued, Mr. Nicholson stated, that when a pupil, he saw in the hospital practice of Sir Astley Cooper, a scirrhous heart, taken from the body of a female, both of whose breasts and one of the eyes had been removed for scirrhus. Sir Astley had no doubt about the scirrhous character of the heart-disease.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES, PARIS.

January 4th.

PHTHISIS.

At this meeting, M. Bureaud Riofrey read a paper on the treatment of phthisis by exercising the lungs, and the exhibition of fatty substances. His arguments are founded upon the extraneous nature of tubercle, and the antagonistic characters of fat. The regulated exercise of the breathing is supposed by him to be capable of favouring the expulsion of the foreign matter.

Three other memoirs on comparative physiology, of insignificant interest, were also presented.

January 11th.

NERVES OF THE PERITONEUM.

This evening was occupied by the reading of a letter from M. Vrolik with the description of the nerves of the peritoneum of the whale, the tendency of which is mainly to support the views of M. Bourgery respecting the distribution of nervous filaments to the human peritoneum.

January 18th.

FUNCTIONS OF THE PNEUMOGASTRIC NERVES.

M. Sandras read a memoir, the joint labour of himself and M. Bouchardat, the object of which was to determine the importance of the pneumogastric nerves in the process of digestion. With this view they instituted a series of researches to ascertain :—

1. The manner of dying in animals in whom the pneumogastric nerves have been divided.
2. The function of these nerves in digestion.
3. Their function as regards the production and absorption of chyle.
4. Their function in reference to the digestion of fecula.

As a secondary point they wished to determine whether, and how, the divided nerves are capable of uniting. Their experiments are arranged in two series, one having reference to the phenomenon attendant upon the entire section of the nerves; the second taking account of the results of successive divisions of the nerves. The simultaneous section of both nerves gives rise to phenomena which establish the following facts :—

1. Rabbits and dogs do not die immediately when a piece of the nerve of twenty millimeters in length is removed opposite the cricoid cartilage. These animals may survive several days without great distress.
2. In animals thus operated upon the food passes the cardia in small quantity or not at all.
3. In dogs, although digestion has commenced, it is arrested by division of the nerves.
4. The digestion of amylaceous matters in the intestines is not materially interfered with.
5. These nerves are essentially motor.

The second class of experiments proves :—

1. That dogs survive four or six days after the section of the second nerve, and sixteen or seventeen after that of the first, when the two nerves are divided at different times.
2. That animals thus treated eat with avidity, but do not exhibit an unintelligent voracity. They cease to feed as soon as the œsophagus becomes distended.

To recapitulate, the authors consider that they have established that the *movements of the stomach and digestion* are interrupted by the simultaneous section of both nerves in the neck; and that *intestinal digestion* continues in spite of this division

A letter on the existence of creatine in the organism was read by M. Liebig.

SULPHURIC ÆTHER.

The priority of the discovery of the effects of sulphuric æther was claimed by M. Ducros.

In answer to a question relative to the effect of the inhalation of æther upon the progress of cases operated upon, M. Velpeau said that he had not heard of any serious accident; he had once known some headache remain for a period of twenty-four hours. Several members related their failures to produce insensibility a fact readily accounted for by the clumsy apparatus they had made use of.

ANATOMY OF THE PERITONEUM.

M. Pappenheim referred to the communication of M. Vrolik above-mentioned, and alluded to some researches of his own on the same subject. He stated that many of the fibres supposed to be nervous, were in reality partly elastic and partly cellular tissue.

January 25th.

SEA SICKNESS.

M. Pellarin read a memoir on this subject, in which he endeavours to expose the error of the two most generally received opinions of this distressing sickness, viz, that it is due to congestion of the brain; and the other opinion, that it is produced by agitation of the abdominal viscera. The author attributes the malady to the disturbance of the circulation induced by the varied movements of the vessel. This disturbance, so far from producing congestion of the brain, is considered by the author to deprive it of the quantity sufficient for the due maintenance of its functions. Sea sickness, therefore, according to M. Pellarin, depends upon anæmia of the brain. It is combatted by stimulants, and the avoidance as much as possible of the agitation of the vessel.

ÆTHER-INHALATION.

M. Gerdy detailed his own sensations when under the effects of æther. At first he was annoyed by a sense of heat in the larynx and by coughing, but perseverance shortly overcame those effects, and he then perceived a kind of stupefaction, which extended over the entire frame. This was accompanied by an agreeable tingling, and a sense of warmth, with a vibration, such as is communicated by the touch of a body in a state of vibration. His sight was but little affected, but the hearing was more interfered with. From the farther account of his sensations, it would appear that he did not induce entire insensibility.

M. Velpeau, in detailing his farther experience, stated that he regarded the inhalation as a discovery of the highest importance.

M. Robin presented a memoir concerning the mode of action exercised by those substances during life, which after death preserve the body from putrefaction.

February 1st.

ÆTHER-INHALATION.

M. Velpeau detalied a case of fracture of the thigh, the reduction of which was readily affected under æthereal insensibility. He also related several successful cases, including removal of tumours, amputations, &c.

M. Magendie could not partake of the enthusiasm in reference to æther, and in a long speech endeavoured to alarm his hearers by the reports of the evils which might ensue. He ended by designating the process not only as dangerous, but immoral. His objections were justly regarded as absurd.

M. Lallemand enquired whether it was not a fact that the æther-inhalation destroyed for the time the contractility of the muscles; if so, it might lead to much inconvenience in certain operations, the success of which depended upon regular and definite contraction of the muscles after incision.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE, PARIS.

January 5th, 1847.

OPERATIONS FOR STONE.

After the ordinary business of the Society had been transacted, M. Roux read a report on two memoirs submitted to the academy on the subject of the operations for stone. Of these the memoir of M. Henry consisted of the detail of a case in which the bilateral operation had been performed on a man aged 35, the nucleus of the stone (which was of an immense size,) being a shoemaker's awl. The other from M. Renaud, contains the narrative of four successful cases of lithotomy in children from four to ten years, and of a case of lithotrity in an adult.

In his report on these memoirs, M. Roux took occasion to remark on the great preponderance of stone cases among the lower orders, and the general success of lithotomy in children. He then drew a comparison of the advantages of the operations of lithotomy and lithotrity, deciding in accordance with general opinion that lithotomy is preferable in early age. He likewise considers that it is in exceptional cases only that lithotrity is to be preferred even in the adult.

M. Velpeau also expressed some doubts as to the presumed superiority of lithotrity, in consequence of which it was proposed by M. Amussat, that the question should be formally discussed at a future meeting.

January 12th.

ÆTHER-INHALATION.

On this evening was introduced the interesting subject of the inhalation of æther in surgical operations. M. Malgaigne first related several successful cases, and described the apparatus employed, but at the present time, neither the one nor the other of these are of sufficient importance to be repeated.

M. Velpeau, at this time being unacquainted with the effects of æther, had been afraid to give it a trial.

M. Guibourt and others testified to the innocuity of the agent.

THEORY OF INTERMITTENTS.

M. Piorry again occupied the Society with his theory of intermittent fever, which he expressed in the following aphoristic terms:—

1. A complete accession of fever,—chilliness, heat and sweating,—is a neuropathic action commencing in the abdominal and thoracic plexus of nerves, and especially in the portions belonging to the spleen, liver, and genital organs. This nervous action extends to successive points in the cerebro-spinal system; it eventually reaches the peripheral nerves and gives rise to rigor.

2. Periodic attacks which are few in number, may originate in the renal or the ovarian plexus, the neuropathy thence extending to the splenic plexus and nerves.

3. Quotidian, tertian, and other periodic forms originate in a neuropathy of the splenic plexus.

4. The cause of this neuropathy lies in various lesions of the spleen, as congestion, inflammation, hypertrophy, &c., chiefly in the first of these.

5. The splenic affection is due to marshy exhalations.

6. These exhalations act primarily on the blood, to which they act as a direct poison.

7. The primary action of this deteriorated blood is upon the spleen, in which it produces engorgement and hypertrophy; thence the nervous affection.

8. This affection of the spleen in its turn affects the constitution of the blood, the degeneration of which is seen in the pallor of the skin, general debility, &c.

To this theory M. Rochoux advanced two objections:—

1. The intermittent fever precedes the lesion of the spleen.

2. The fever ceases, though the spleen retains its volume

M. Bouillaud also attacked the theory, and commenced by observing, that, if true, it was not original, as the same view had previously been taken by M. Audouard. He further stated that he had studiously examined the state of the spleen in 250 cases of ague, but that he found no grounds for supporting the theory of M. Piorry, but on the contrary, that he had seen numerous cases in which the fever had preceded the splenic engorgement, as well as many others in which the engorgement had remained long after the periodic attacks had subsided. M. Bouillaud considers rationally, that the engorgement is the result of the paroxysms, and not the cause.

January 19th.

After the reading of some uninteresting communications on the subject of æther inhalation, the discussion on intermittent fever was resumed by M. Castel.

January 26th.

This sitting was occupied with details of individual experience with the vapour of æther, none of which however are of sufficient interest to be repeated.

February 2nd.

ÆTHER-INHALATION.

The President announced that a commission of enquiry had been set on foot to make definite investigations respecting the effects of the æthereal inhalation.

M. Honoré related a case of neuralgia cured by it.

M. Jobert mentioned several successful cases, and alluded also to one in which insensibility remained for several hours. He stated that he did not consider it suited to long operations, but that it is perfectly applicable to those which can be performed with rapidity.

M. Blandin considers that patients under æther did in reality feel, but forgot their sensations.

M. Bouvier narrated a case of puerperal mania, in which he had exhibited the æther vapour; it had no beneficial effect, but did not appear to be prejudicial. In a case of painters' colic it was completely successful in relieving the pain.

OPERATIONS PERFORMED UNDER THE INFLUENCE OF ÆTHER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Not having observed in the Society's Journal any report of cases illustrative of the beneficial effect of the inhalation of the vapour of æther during surgical operations from this neighbourhood, I send you the two following cases, which are only valuable as confirming those already stated by other surgeons.

I am, Sir,

Yours obediently,

WILLIAM JOSEPH LUNN, M.D.,

Surgeon.

Hull, March 13, 1847.

CASE I.

Eliza Spinks, aged 32, a strong country woman, from whom I removed a large adipose tumour from the dorsum of the scapula. With the kind assistance of my friends my patient was brought under the intoxicating influence of the æther in three minutes. The entire operation lasted ten minutes, during which the only feeling at all assimilating pain was a sensation of cold drops of water falling on the shoulder, which caused her to shrink; this was probably at the time of the first incision, which was six inches in length. On being asked when laid down if the operation was over, she replied "she did not know," and has many times since declared that she suffered no pain, and was dreaming a pleasant dream. Little or no fever followed, nor was there any headache, which might have been expected, as she is subject to it. In ten days my patient returned into the country, and is now nearly well.

CASE II.

John Snee, a healthy boy, aged 18, with an increasing exostosis of the metacarpal bone of the little finger, the size of a hen's egg, caused by a crush in a coal pit three years ago. The pressure of the bony growth upon the metacarpal bone of the ring-finger, which had also been injured by the accident, has caused absorption of most of that bone, consequently a careful dissection was requisite to save the finger. The entire removal occupied twelve minutes; and the operation was completed, the arm in a sling in twenty. During the whole of this time the patient was perfectly insensible, except on making the first incision, which was probably owing to my commencing a few seconds too soon, before the complete effect of the æther was produced, but this felt merely like a scratch. The preparatory inhalation occupied eight minutes. During the whole time the boy dreamed that he was in Heaven, and did not return to consciousness until about a minute or so after the operation was finished, which he did without any unpleasant effect, although he breathed the æther more or less for full half an hour.

In the above cases the inhalation produced little or none of the ghastly distressing countenance or sense of suffocation as stated often to occur; this I attribute to the patient's breathing through the apparatus merely atmospheric air for the first minute or so until accustomed to the process, and then gradually admitting the vapour.

The narcotic effect was kept up in the first case by merely twice repeating the inhalation for three or four inspirations; and in the latter by keeping the mouth-piece constantly applied, and letting in more or less atmospheric air as was thought requisite. The pulse in these patients varied in a singular manner: in the woman it scarcely exceeded 80, and in the boy it rose at one time to 160, but dropped to 100 at the close of the operation. In neither did the æther produce the slightest injurious effect, or in any degree retard the healing process. It may be well to mention, that in the female there did appear for a short time so much exhaustion as to induce us to give a little brandy and water, but in the boy no such stimulant was necessary. In neither was there any depressing hæmorrhage.

In this town, as far as I have heard, the æther has not been much used, except in tooth-drawing, but in the few cases where it has, I believe no injurious consequences have occurred.

ABSTRACTION OF BLOOD IN THE NARCOTISM FROM ÆTHER-INHALATION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I beg to suggest in the event of a case of narcotism from the inhalation of æther, where the system seems unable to rally from its effects, whether the early abstraction of a few ounces of blood is not more likely to produce re-action than the administering of stimulants at a later period. Mr. Nunn's case in the Journal of the 10th instant, discloses the fatal effects of æther in a person comparatively of a sound constitution; its continued use for some minutes to mitigate the sufferings of the patient in a severe operation, was followed by symptoms of compression of the brain, verified by the *post-mortem* appearances in the stage of collapse. Brandy and ammonia were given, and failed, to arrest the fatal progress. It appears to me probable, where stupor continues an unreasonable time, accompanied with stertorous breathing, and it is to be supposed a state of the pulse and pupil of the eye, significant of congestion of the brain, depletion in accordance with the urgency of the symptoms is more likely to be effective; and the case justifies this question,—whether there is not greater danger to be apprehended in all cases in which æther for any time has been given, attended with little or no loss of blood to the system? I have not tried the æther in any case as yet, and feel myself open to a rebuke in offering observations unsupported by facts to your readers, but as the suggestion is a comparison of the effects of this poison with other stimulants, there appears no reason why the hint should not be given to arrest in others if possible the fatal consequences from so useful and powerful an agent.

I am, Sir,

Your obedient Servant,

J. E. BECKINGSALE.

Newport, Isle of Wight, March 16th.

ÆTHER-INHALATION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Since the introduction of ætherization into this country, I have employed it in eight cases reqniring surgical operation, five of which were followed with the most satisfactory result. In the other three, some difficulty was experienced in the process of inhalation, in a great degree owing to the timidity of the patients, and only a partial effect accrued. The time required to produce the narcotic influence, varied from three to eight minutes. Females apparently were more rapidly and completely narcotized than males, and continued in a state of insensibility a longer period of time. Return to consciousness in all three of the females subjected to its influence was attended with hysteria, simulating the effects of stimulus, which lasted, however, but a few minutes. Five of the above cases were Infirmary patients, the remaining three private. In none did any alarming symptoms follow, notwithstanding the experience of some practitioners has been adduced to the contrary. I feel it a duty to record my testimony in support of the safety of æther inhalation, and regard it as a means emminently calculated to alleviate human suffering, in cases requiring surgical operations.

The apparatus found most easy of application, and producing the speediest effect, was simply a large bladder, furnished with an ivory tube for the mouth, and cushion for covering the lips; it was much to be preferred to one previously used of a more costly nature, and far more complicated in its construction, which consisted of a glass chamber and a flexible tnbe.

I remain, Sir, your obedient servant,

W. C. WORTHINGTON, F.R.C.S.,

Senior Surgeon to the Lowestoft Infirmary.

Lowestoft, March 1, 1847.

General Retrospect.

ANATOMY AND PHYSIOLOGY.

MEMBRANA DECIDUA.

The account which Dr. Sharpey gave of the formation and structure of the membrana decidua in the uterus of the bitch, and which he inferred might apply to this membrane in the case of the human female, as also of all viviparous animals, has been amply confirmed by Bischoff. Having had the opportunity of examining the uterus of a woman supposed to have been impregnated about three weeks before death, he was enabled to demonstrate quite satisfactorily, that, as Dr. Sharpey had suggested, the membrana decidua in the human female, as in the bitch, is merely the ordinary mucous membrane of the uterus, considerably developed, and that it consists essentially of enlarged uterine follicles and their blood-vessels, together with an unusually large quantity of secretion which these follicles have poured out. The internal surface of the uterus presented an appearance quite different to its ordinary one, being finely villous; and this was especially evident on placing it in water, or examining

perpendicular sections of it. The surface itself, when looked upon from above, appeared as if perforated by a number of small apertures, or covered with numerous white points, and these, when examined by the microscope, were found to be the openings of cylindrical glandules. These glandules, or follicles, were from one and a half to two Paris lines in length, were held together by a transparent material, and terminated each by a blind extremity, which rested on the fibrous tissue of the uterus. They ran a somewhat wavy course, but never branched or anastomosed. Previous to impregnation it seems to be exceedingly difficult to discover these glands in the mucous membrane of the uterus. Probably they then exist in a very undeveloped state, but immediately on the occurrence of conception increase rapidly, and exude an abundant secretion. Of these glands and their secretion (together with blood-vessels,) the membrana decidua and later on the placenta essentially consist. The statement that a membrana decidua exists in the Fallopian tube, as well as in the uterus, in cases of Fallopian impregnation, Bischoff combats, by observing that so far as has yet been seen, the lining membrane of the Fallopian tube contains no glands by which the formation of a structure corresponding to an ordinary membrana decidua could be effected. A similar view to the above, in regard to the nature of the membrana decidua, has been advocated also by M. Courtz, who considers this structure to be merely a somewhat altered condition of the mucous membrane of the uterus.

A description of the mucous or lining membrane of the uterus, in the unimpregnated state, has been furnished by M. Deschamps. He states that this membrane, when carefully dissected off, appears as a whitish, very delicate, and friable structure; it is continuous above with the membrane lining the Fallopian tubes, and below, at the neck of the uterus, it is united with the mucous membrane of the vagina. He mentions also, that with a lens he has distinctly observed the free surface of the membrane to be finely villous, owing to the number of minute follicular glands with which it is beset; from the orifices of these he observed a viscid fluid to exude on pressure. This fluid, with which the interior of the uterus is moistened, possesses all the ordinary characters of mucus.—*Dr. Kirke's Report on Anatomy, &c.*, in *Dr. Ranking' Half Yearly Abstract*, Vol. IV.

PATHOLOGICAL CHEMISTRY.

CONDITION OF THE BLOOD AFTER DEATH FROM STRANGULATION.

M. Cicerone having observed that after death from asphyxia the quantity of fibrin in the blood is diminished, and that after the respiratory movements have ceased circulation of the blood still continues for some time, was led to infer, that in those cases in which respiration is stopped by the application of a cord round the neck, and in which also the return of blood from the jugular veins to the heart is at the same time prevented, the circulation of blood through all other parts of the body below the cord being in the meanwhile continued, and the conversion of arterial into venous blood continuing (though imperfectly,) to take place, the blood accumulated in the jugular veins would be in its natural condition, whilst that in all other veins below the constricted part of the neck would have suffered a diminution in the quantity of its fibrin. If such was the case, it would be an important fact in relation to medical jurisprudence, inasmuch as this difference between the character of the blood examined from the jugular veins and that from the rest of the body, would not be observed in those cases in which a cord had been tied around the neck of a person already dead. M. Cappa has recently undertaken some researches on the subject. In ten hens which he strangled, death was caused six times by asphyxia and apoplexy conjointly, and twice by asphyxia alone, and twice by apoplexy alone. In the two last cases the corpuscles of the blood in the veins above the constricted part of the neck, were found beneath the microscope to be distended, most of them deprived of their nuclei, others elongated, and others more or less broken up; whilst the corpuscles of the blood from other parts of the body had their natural appearance. But, in the two cases in which death resulted from asphyxia alone, the above-mentioned alterations in the corpuscles occurred in the blood of parts below the seat of constriction; and in the six cases in which death was produced by asphyxia and apoplexy conjointly, the same alteration of the corpuscles was observed alike in all parts of the body. The test proposed by M. Cicerone would therefore, according to M. Cappa's account, only be available in the cases where death was caused by apoplexy, and not in those cases in which death from strangulation is produced by apoplexy and asphyxia conjointly, and which are most frequent. M. Cappa, moreover, has found that the blood in the jugular veins above the ligature is thicker, and contains a larger proportion of fibrin, (as M. Cicerone inferred,) in death from apoplexy alone; whilst in death caused by asphyxia alone, an opposite condition was observed. This test, as well as the other, will therefore fail to be of service in those cases (the large majority,) where death is due to the combined influences of asphyxia and apoplexy.—*Medical Gazette*, Dec. 11, 1846., from *Heller's Archiv.* Heft, 2, 1846.

NATURE OF DIABETES.

M. Bouchardat has published another memoir on this obscure disease, of which the following is a summary:—

1. Diabetes consists essentially in a perversion of the digestion of feculent substances. These articles of food instead of being dissolved in the intestines by means of the pancreatic juice, as in health, are dissolved in the stomach, giving rise to the formation of diastase.

2. The theory of the neutrality or alkalinity of the blood in this disease is erroneous, and the continuance of food containing fecula together with the administration of soda is hazardous.

3. It is impossible, for various reasons, to accomplish more than temporary amendment in hospitals, but if we meet with a patient whom we can treat at home, surrounded with all the necessaries of life both hygienic

and dietetic, we may in many cases accomplish a complete cure, provided there is neither tubercle in the lungs or any disease of the pancreas and its ducts, and that the patient has resolution to avoid the use of food containing fecula.—*Gazette Médicale*, Janvier, 1847.

PATHOLOGY.

ON THE CUTANEOUS ERUPTIONS INDUCED BY VARIOUS MEDICINAL SUBSTANCES.

Opium.—The eruptions which in certain individuals follow the use of the preparations of opium are always of an exanthematous nature. In general they consist of red isolated patches not unlike those of measles. This kind of eruption is rare.

The *Solaneæ.*—The eruption induced by the ingestion of the preparations of this tribe of plants are also of the order exanthemata, and are as uncommon as those which are the effect of opium. The patches are larger and irregular, resembling scarlatina.

The *Oleo-resins.*—All the medicinal substances of this class are liable to be followed by cutaneous eruptions, but none so frequently as turpentine and copaiba. The eruption very much resembles that produced by opium and belladonna, being sometimes measly, at other times scarlatinous in its appearance. It is a rare exception to see either vesicles, pustules, or papules.

Cod-liver oil.—This medicine sometimes gives rise to a form of eczema, which appears generally about the fifth day from the commencement of its use; it is, however, rarely observed.

Iodide of potassium.—The eruptions which follow the use of this medicine are far from uniform, sometimes being eczematous, at others pustular, as in acne. It sometimes happens that the skin escapes the action of the medicine, and that the mucous membranes are attacked instead; in such cases we observe coryza and conjunctivitis, which cease as soon as its use is suspended, but which will not yield to topical treatment as long as the medicine is persisted in.

The discrimination of the cutaneous affections which are induced by different medicinal substances taken internally, is of no slight practical importance; we have seen ignorance of these characters and causes give rise to very unpleasant mistakes.—*Annuaire de Therapeutique*, 1847.

STRONGULUS GIGAS IN THE HUMAN KIDNEY.

A recent number of the Journal of the Academy of Medicine of the Loire Inférieure records the curious case of the presence of a living strongulus in the human kidney. The subject of the case was a farmer, aged 60, of intemperate habits, but robust. After a debauch of several nights' duration, he was seized with severe pains in the region of the right kidney, which were attributed to renal calculus. The resources of legitimate medicine, as well as of numerous quacks, were exerted in vain for the relief of his sufferings, a transient cessation from his pain being only obtained from the use of sulphuric æther and the spirits of turpentine. At the expiration of three years' continued suffering the patient had become reduced to a skeleton. For the last ten months of his life, indistinct undulatory movements were visible over the affected kidney, which were accompanied by a sensation of "creeping" internally. The patient at length died in a state of complete marasmus, when dissection revealed the presence of a large *Strongulus gigas* in the right kidney, the structure of which had become greatly disorganized.

ON THE MEANS OF ASCERTAINING WHETHER THE SOURCE OF A UTERINE LEUCORRHŒA BE IN THE FUNDUS OR CERVIX UTERI.

Dr. Mitchell considers that the above point may be determined by means of an instrument which he has devised. This consists of a gum-elastic catheter, with a stilette, to the bulbous extremity of which a portion of litmus paper is fixed. The catheter is introduced into the cervix uteri, and the stilette being pushed forwards, the litmus paper is allowed to remain in contact with the secretion. It is then withdrawn into the catheter before the latter is removed. The entire instrument is then withdrawn, and the paper examined; if it remains of its original colour, Dr. Mitchell considers that the disease is located in the cervix; if, however, it be reddened, we have evidence that the fundus is the source of the discharge. — *Dublin Medical Press.*

[There appears to us to be one source of fallacy in this experiment, which Dr. Mitchell does not take into account, viz., the acid nature of the vaginal mucus, the accidental contact of which would equally redden the litmus.]

MATERIA MEDICA.

FORMULÆ FOR THE IODIDE OF IRON.

The Messrs. T. and H. Smith now make a solution of iodide of iron in a Florence flask, with six drachms of pure iron filings, two ounces two drachms of iodine, and four ounces and a half of cold distilled water. This mixture is boiled till the liquid loses its colour; it is then filtered rapidly into a clean flask, and evaporated at a boiling heat. They obtain the compound either as a crystallized hydrate, or in an amorphous anhydrous form, according to the extent of the evaporation, and inclose it, without the slightest delay, in small well-corked bottles. As all the solid preparations are liable to change, they farther recommend powdering their anhydrous iodide as soon as it is taken from the flask, and then instantly to incorporate it with twice its weight of pure refined sugar in powder, and to make it up in mass with honey.

M. Calloud, in a memoir on this salt, points out the advantages of preparing it by double decomposition. He shows, by analysis of various specimens, that when the salt is prepared in the direct manner, and its solution evaporated to dryness, there almost always occur flakes of crystallized iodine adhering to a bluish mass, friable and insoluble in water, which is no other than a mixture of reduced iodine and sesqui-iodide of iron. The following are his observations on the iodide of iron obtained by double decomposition:—

By reducing iodide of potassium and sulphate of protoxide of iron to a fine powder, and triturating the

mixture of the two salts, we obtain the protiodide of iron.

1 part of sulphate of crystallized protoxide of iron - - - - - - - - - 161.52
1 part iodide of potassium - - - 206.94

The double decomposition being produced by the assistance of the water of crystallization of the sulphate of iron, we treat it with alcohol of 85° per cent. which only dissolves the iodide of iron that is formed. The alcoholic solution has all the characters of the protosalts of iron; and the re-action of the two salts is complete. The sulphate of potass is, in this case, in the condition of the insoluble salts.

The iodide of iron, thus mixed with the sulphate of potass, may be employed therapeutically with undoubted advantage in a dry state.

The following formula may serve for certain pharmaceutical preparations, having iodide of iron for a base :—

Crystallized sulphate of iron - - - 3 parts.
Iodide of potassium - - - - - 4

It is important to choose the sulphate of iron in small, colourless, and translucent crystals, which integrally represent the protoxide, with seven proportions of water. The iodide of potassium ought to be perfectly neutral and pure; the least excess of alkali in the iodide would also be at once shown by the sulphate of iron, which, in this case, is a good test. To be satisfied of the purity of the substances, the mixture of the two salts being dissolved in a certain quantity of water, the latter ought not to be rendered cloudy by the green or yellow oxide of iron, which would indicate the employment of a basic iodide of potassium, or a sulphate of iron, partially peroxidized.—*Dr. Day's Report* in *Ranking's Half-Yearly Abstract*, Vol. IV.

Mr. Hemingway has more recently proposed the following formula :—

Take of Iodine, (pure and dry,) oz. iij., dr. vij., scr. ij.
Iron filings, (clean,) . . oz. ij.
Distilled water, ... *q. s.*

Add, little by little, the iodine to the iron filings, in a mortar, containing six ounces of water, allowing each action to cease previous to the next addition; agitate the mixture without additional heat until it assumes a green colour; transfer the liquid portion into a measure; wash the filings that remain with half-an-ounce more of water, again, and a third time; mix the washings with the decanted fluid, and make up exactly to twelve fluid-ounces and a half; call it "the solution," and keep it in a well-stoppered bottle, with iron wire and filings; each fluid-drachm will contain thirty grains of crystallized iodide of iron. When wanted for use pour off without disturbing the sediment and pass through coarse filtering paper.

From this solution it is proposed that the syrup should be made, and from it also (for the purpose of dispensing,) inferior solutions of any required strength may be easily obtained. Should it become brown by keeping, and it will if the stopper is insecure, the bottle must be shaken, that the green appearance may be recovered; and should this be the case when syrup is about to be made, time must be given for the dregs to subside, in order that filtration may proceed as rapidly as possible.

To make the syrup :—

Take of Simple Syrup, (*white*,) P. L. - - - 15 fluid-oz.
Solution of Iodide of Iron, as above, 2 fluid-oz.

Put the syrup into an upright pan—a common saucepan lined with enamel is suitable—and accurately balance the whole; next, apply heat, until by a gentle ebullition it has decreased in weight two ounces *avoirdupois*; remove it from the fire; get ready the "solution," and, without loss of time, mix it intimately with the reduced syrup, and bottle directly (if consumption is small,) in four-ounce bottles; when quite cold shake well up. Each fluid-drachm contains four grains of crystallized iodide, the equivalent of rather more than three grains of the dry.—*Dublin Medical Press*, Jan. 10th.

THE PROVINCIAL MEDICAL DIRECTORY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Having understood that one of the principal objects of the London and Provincial Medical Directory was to furnish the profession, not only with the names, but also with the *qualifications*, of its legitimate members, I may, perhaps, be allowed, through the medium of your Journal, to express my surprise that so many persons should be introduced as recognized practitioners, without the slightest intimation as to the nature or date of their credentials. The existence of this defect must have attracted the notice of all who have glanced over the pages of the Directory; and my only motive in thus mentioning the error, is the hope that hereafter it may be corrected. Were the omissions of the specific qualifications rare and accidental, it might be ungenerous to make any comment upon them; but that this is not the case, may very readily be *proved*. For example :—In the first twenty pages of the provincial department, there are upwards of a *hundred* names without *any* statement of the premises upon which the parties are entitled to a place in a medical list. In the next twenty pages, there are also upwards of a hundred omissions of the same kind; and in the next twenty pages likewise; so that in sixty pages there are *three hundred* claimants who give no account of the foundation upon which their claim rests. I have not made an actual enumeration beyond the sixtieth page, but conclude that the remainder of the work is chargeable with a similar defect.

Trusting that the editors will in future *exclude* those who will not take the trouble to supply an accurate and definite description of themselves,

I remain, Sir,
Most respectfully yours,
CANDIDUS.

March, 1847.

[We have received other communications pointing out the same defect.

ÆTHER-ADVERTISING.

It is with regret that we feel called upon to notice the subjoined letter on the subject of æther-inhalation. On referring to the "Provincial Directory," we observe the name of "Matthew Carter, Castle Cary, Somerset, Physician, M.D., Memb. Roy. Coll. Phys., Lond., 1846," &c., &c. It cannot be supposed that the writer of the letter, and the Member of the Royal College of Physicians, whose name appears in the "Directory," are one and the same individual, and the genuine Dr. Carter owes it alike to the College, to his professional brethren, and to himself, immediately to disavow the use which has been so reprehensibly made of his name:—

THE VALUE OF THE VAPOUR OF ÆTHER IN THE TREATMENT OF DISEASE.

To the Editor of the Sherborne Journal.

SIR,—I feel it my duty energetically to draw the attention of the public, but more particularly of my medical brethren in this county, to an important, though simple fact,—namely, to the value of the inhalation of æther in the treatment of some of those various chronic, and indeed acute forms of disease, which have hitherto unhappily baffled the best-devised means of our art.

The result of my experience of its efficacy in the treatment of disease, has astonished and delighted me. Taught hitherto to believe, and observation and experience having confirmed my teaching, that there existed not in the details of medicine any agent which should deserve the name of "specific," I cannot express the amount of my gratification in having thus to say, that the vapour of æther, judiciously applied, in my opinion, approaches nearer unto what may be understood by the term "specific," than any other therapeutic agent with which we are acquainted.

The most violent paroxysms of gout, of rheumatism, of neuralgic affections, tic-douloureux, &c., &c., have yielded, as it were magically, to the influence of this agent, and in no one instance in which I have applied it have I had any reason to doubt of its efficacy; on the contrary, the transition from acute pain to the most perfect ease, has, in each instance, attested its most salutary property; and it is right to mention, that in no one case have I found it necessary to carry the inhalation of the vapour so far as to induce any thing approaching to insensibility; the slightest influence of the æther produces *immediate results*, and pain begins to cease almost instananeously.

I trust I have said enough to draw the attention of my medical brethren to *the value of the fact*. I shall be happy if, by this means of publicity, I induce them to test, and attest for themselves, the truth of what I now assert, confident as I am that an agent is discovered of stupendous power, which in the hands of our profession, rightly wielded, will, I doubt not, prove one of the most valuable, as it is, I think, most decidedly one of the most certainly efficacious means of treatment to which the medical profession has access.

Your obedient servant,
MATTHEW CARTER, M.D.

Castle Cary, February 15, 1847.

P.S.—I hope shortly to lay before the medical profession a short pamphlet on this subject.

Medical Intelligence.

FATAL EFFECTS OF ÆTHER: INQUEST.

An inquest has been held on a young woman, the wife of a hair-dresser, at Spittlegate, in the county of Lincolnshire, from whom a tumour had been removed while under the influence of æther. She never rallied, and died without the slightest re-action having taken place, sixteen hours after the operation. The following verdict was returned:—"That the deceased, Ann Parkinson, died from the effects of the vapour of æther, inhaled by her for the purpose of alleviating pain during the removal of a tumour from her left thigh, and not from the effect of the operation, or from any other cause." The surgeon who performed the operation stated that he fully concurred in the verdict, as he had no doubt whatever that the æther alone was the cause of death, and it was a duty he owed to the public to say so.

GLOUCESTERSHIRE MEDICAL AND SURGICAL ASSOCIATION.

THE MEDICAL REGISTRATION BILL.

Some time since a meeting of this Association was convened for the especial purpose of considering what course should be pursued in reference to Mr. Wakley's new Registration Bill, when the following resolution was adopted:—"That the Medical Registration Bill proposed by Mr. Wakley is cordially approved by this Association, and that it be energetically and promptly supported."

The Bill, it is understood, is now in the hands of Counsel; but when the proper time arrives, active measures will be adopted to carry the resolution into effect.

MEDICAL APPOINTMENTS.

Dr. William Wegg has been appointed Physician to the Westminster General Dispensary, in the room of Dr. S. W. J. Merriman, resigned. Dr. Merriman has been appointed Consulting Physician to the Institution.

Dennis Phelan, Esq., Surgeon, of Dublin, has been re-appointed an Assistant Poor-Law Commissioner for Ireland.

M. Gibert has been elected a Member of the Académie de Médecine, Paris, in the Section of Therapeutics.

M. Civiale has been elected a Member of the Académie des Sciences, Paris, in the room of M. Bory de St. Vincent, deceased.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, March 12th:—G. Allbutt; C. M. Empson; H. Barnett; H. Green; W. Faithfull; J. M. Birom; J. Rice; C. S. Hugo.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, March 4th:—Peter Brady; Thomas Orton, Rothwell; William Cumming; Edmund John Burman, Banstead; James Graham, Liverpool.

OBITUARY.

Died February 20th, at Cahir, of fever, Michael Daniel, Esq., Surgeon to the Fever Hospital and Dispensary.

February 28th, of fever, David Smith, M.D., Medical Attendant of the Middleton Fever Hospital and Dispensary.

Lately, at the Grange, Melton, aged 70, Thomas Bland, M.D., a Magistrate of the County of Suffolk.

Lately, aged 43, Edward Lubbock, M.D., Physician to the Norfolk and Norwich Hospital.

BOOKS RECEIVED.

The Prevention and Treatment of Disease in the Potato and other Crops. By John Parkin, M.D., &c. &c. London: Wood. 1847. 8vo., pp. 84.

A Treatise on Diet and Regimen. By William Henry Robertson, M.D., Physician to the Buxton Bath Charity. Fourth edition. Part I. London: Churchill. 1847. pp. 116.

On Wounds and Injuries of the Abdomen and the Pelvis, &c. By G. J. Guthrie, F.R.S. London: Churchill. 1847. Royal 8vo., pp. 73.

On the Sanatory Condition of Newcastle-on-Tyne, and the Means necessary for its Improvement, &c. By George Robinson, M.D., Joint Lecturer on Materia Medica and Forensic Medicine in the Newcastle-on-Tyne Medical School, &c. Newcastle-on-Tyne: Richardson. 1847. 8vo., pp. 58.

Analysis of Evidence laid before the Health of Towns' Commission on Metropolitan Sewerage Manure, &c., &c. London: 1847. 8vo., pp. 32.

METEOROLOGICAL JOURNALS FOR JANUARY, 1847.

Kept at Sidmouth, by W. H. Cullen, M.D.; at Romsey, Hants, by Francis Buckell, Esq.; at Uckfield, Sussex, by C. L. Prince, Esq.

	Sidmouth.		Romsey.		Uckfield.
Mean of External Thermometer at 9 A.M.	40.40	.....	37.10	.....	.
. . . . . 9 P.M.	39.67	.....	37.50	.....	.
. . . the Maxima, ...	44.39	.....	38.70	.....	
. . . . Minima, ...	38.93	.....	33.50	.....	
Absolute Mean	41.66	.....	36.10	.....	36.43
. . . . . of ten preceding years.	40.34	.....	.	.....	.
Extreme highest on the 25th	50.	on the 26th	51.50	on the 26th	51.
. . lowest 1st & 3rd	31.50	on the 1st	26.00	on the 3rd	24.
. . range	18.50	.....	25.50	.....	27.
Mean daily range	7.00	.....	9.08	.....	8.54
Greatest daily range	.	on the 25th & 24th	19.00	.....	.
Least	.	on the 8th & 28th	.50	.....	.
Maximum in the Sun	.	.....	.	on the 14th	62.5
Minimum on the Grass	.	.....	.	on the 3rd	22.
Mean of Barometer at 9 A.M.	29.969	.....	29.366	.....	29.83
. . . . . 9 P.M.	29.938	.....	29.339	.....	.
Extreme highest on the 1st	30.440	on the 1st	29.840	on the 9th	30.27
. . . lowest on the 28th	29.300	on the 28th	28.580	on the 28th	29.15
. . . range	1.140	.....	1.260	.....	1.12
Mean dewpoint at 9 A.M.	37.80	.....	.	.....	32.79
. . . . . 9 P.M.	36.20	.....	.	.....	.
Number of days fine	6	.....	8	.....	.
. . . . . snow	3	.....	.	.....	.
. . . . . dull and variable . . .	11	.....	.	.....	.
. . . . . on which any rain fell .	11	and snow	19	.....	.
Quantity of rain in inches	2.98	.....	.	.....	1.81
Evaporation	.	.....	.	.....	.63
Thunder and lightening on the 24th.					
Prevailing Winds, ...	S.E. N.E.	.....	N.E. S.E	.....	East.

TO CORRESPONDENTS.

Communications have been received from Mr. P. Wright; Mr. E. Daniell; W. J. W.; Dr. Durrant; Dr. Butler Lane; Dr. Black; Mr. T. E. Amyot; the Sheffield Medical Society; Mr. H. L. Smith; Mr. W. H. Broughton.

The continuation of Dr. Addison's paper will be given in the next number, which, as well as Mr. Wright's communication, has been unavoidably delayed on account of the wood-cuts.

PROVINCIAL
MEDICAL & SURGICAL JOURNAL.

THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(Fourth Series of Experimental Researches.)

By William Addison, M.D., F.R.S., Malvern.

(*Continued from page* 120.)

IX. Scrofula.

Scrofula is the term used to designate a particular state or condition of the living body, rendered apparent by the phenomena of its nutrition and diseases. The term, whatever may have been its origin, seems like many others in medical science, to have been handed down with reference to the human structure for convenience sake, rather than for any other reason. Writers upon the subject of scrofula, for the most part, reiterate one after another certain external appearances in the general contour of the person—in the eyes, lips, nose, countenance, or complexion, by which they say those individuals who are scrofulous may be distinguished from others who are not so. But we shall hereafter shew that no satisfactory practical distinctions can be safely made upon such grounds, the constitutional disposition not declaring itself until the qualities of the textures, and their capacity of withstanding injurious influences, have been tested and declared by some irritating or disturbing cause, giving rise to an unusual local increase of nutritive matter; when the form of the morphology or metamorphosis—the conformable or unconformable type of the changes—pronounces the constitutional diathesis.

If there be one fact better established than others in respect of scrofula and scrofulous diseases, it is their hereditary character, the offspring exhibiting bodily and mental powers, and forms of disease similar and analogous to those which have been known to exist previously in one or both parents. This transmission of structural or constitutional and other qualities, from parent to child, is one of those remarkable facts in living bodies, which we look to the recent rapid advances of physiological science to elucidate. To say that children inherit the dispositions and diseases of their parents, and to rest content with the barren assertion, is to leave to conjecture questions of the highest interest to medical and moral science. If the lineaments of the face, the colour of the eyes and hair, the tones of the voice, an ear for music, and mental aptitude, be handed down from father to son, they must be so by a wonderful consentaneous harmony of organization—an almost incredible conformability in the morphology of nutrition; and if the physiology,—if the constitution, temperament and mind, be so similar, then, however little we may be able to explain the fact, it follows almost necessarily that the pathology and diseases will prove so too;—not scrofulous diseases exclusively, but all others also.

"The most certain evidence of the existence of a scrofulous disease," observes a recent medical writer, "is afforded by the production of a soft brittle unorganized matter, resembling curd or new cheese, which is found mixed with the contents of abscesses, or deposited in rounded masses of different degrees of firmness, and varying in bulk from the size of a millet seed to that of a hen's egg; sometimes it is enclosed in cysts, and occasionally it is diffused, as if by infiltration, through the natural texture of the part. To the rounded masses of this substance the name of tubercle has been assigned, and the substance itself has been named tuberculous matter."

X. Seat and Nature of Tubercles in the Lungs.

Tubercular consumption and phthisis are terms used to designate that species of disease which consists in the filling up of the air-cells of the lungs,* and the destruction of their vascular walls by a soft, brittle, white matter, named tubercle or tuberculous matter. The best and most recent pathologists have differed in their statements and opinions regarding the seat and nature of tubercles in the lungs, nor are they agreed as to the changes they undergo. Laennec describes them as small firm bodies, which gradually enlarge, then soften, and by degrees become converted into a liquid mass. Andral differs somewhat from Laennec, he says that tubercles soften, not from any spontaneous changes in themselves, but from an admixture of purulent matter poured out from the living texture immediately surrounding them. Dr. Carswell states that

* Dr Cumin in *Cyclopædia of Practical Medicine*, Vol. 3, p. 701, Art. Scrofula.

tubercles originate from morbid changes in the blood, and that their most frequent seat is the surface of the mucous membranes; this author believing, in common with many others, that the membrane of the air-cells of the lungs is a mucous membrane. Dr. C. J. B. Williams states that "lymph, pus, and tubercle, pass by imperceptible gradations into each other;" and in this opinion I concur, in so far as that pus may pass into tubercle or mucus, or into a mixture of tuberculous and mucous matter, but the converse never can occur.

Tubercles exist in the lungs more frequently than is generally imagined. Of the numerous apparently-healthy lungs which I have examined in the course of my researches, I have found them in about one-third. In their early state they escape notice, unless searched for with a lens in very thin sections, gently extended upon a dark back-ground. In order to make out correctly the primary situation of a tubercle, the examination should be made in the lungs of young persons who have died of other diseases; for in those who die of consumption, so many changes have taken place, and the several textures of the lungs have been so altered, that it is impossible to find tubercles in that early condition in which alone their situation, in or upon the membrane of the air-cells, can be determined.

I have repeatedly examined with the microscope the material deposited in the air-cells of the lungs in *pneumonia*, and compared its characters and appearance with that forming a tubercle, without being able to detect any more essential or constant difference between them, than exists between recently excreted and old pus. The same class of objects,—incoherent colourless cells, molecules, and granular matter, appears to constitute the material in both cases,—in hepatization or consolidation of the lung from inflammation, and in consolidation from tuberculous matter; and in both cases also the material takes primarily the shape of the air-cells in which it is seated. In the material forming the consolidation resulting from inflammation, incoherent cellular forms predominate, as they do in recent pus; whereas in tuberculous matter, granular masses and molecules greatly predominate, as is also the case in old pus. And were we to imagine the fluid element of old pus removed or absorbed, the remaining solid matter would be, in my opinion, tuberculous matter; the colourless elements of blood, pus, and tubercle passing by imperceptible gradations into each other.*

In pneumonia the consolidating material is as it were suddenly thrown out over a wide extent of lung. All the blood-vessels are loaded with colourless elements. The blood itself when withdrawn assumes a buffy coat, and the texture, from the various blendings of the red colour of the blood with the white colour of the new material separated from it, assumes various hues between dark red and whitish yellow.

In phthisis, on the other hand, the consolidating material is deposited at distant points, in a much slower manner; it becomes as it were old before it becomes visible, and I have seen sections of the lung display an appearance precisely analogous, and indeed very similar to that of the face in small pox, and this in a patient who did not die of consumption.

My researches have been in like manner extended to the characters and appearances presented under the microscope by the material taken from pimples, boils, and all kinds of eruptions on the skin, and in all these instances incoherent colourless cells, granular matter, and molecules, have been found in the greatest abundance. Moreover—and it is a fact of much importance—the same objects have been profusely detected, not only in the fixed textures surrounding the morbid matter, but likewise in blood taken from the vessels administering to their nutrition. And it would appear that when any texture becomes involved in a hurtful or destructive inflammation, or in a tuberculous or scrofulous disease, that its physiological type is altered and its function impaired; the structural elements, whatever may be their normal qualities or characters, become more and more uniform, and at length corpuscular, the corpuscles being apparently identical with those circulating in the blood.

It has been said that tubercles arise from "an error of nutrition," which is perfectly true, but no practical advantage is derived from the use of a few words which are applicable alike to all diseases.

XI. Structural Changes produced by Scrofulous Disease.

A woman, aged 34 years, died of scrofulous disease of the bones and consumption. The body was examined a few hours after death. Four sinuous canals with external thickened outlets, discharging mucus, lymph, and clotted pus, existed on the right shoulder, leading down to diseased bone and other textures at the joint. Another sinus passed through the breast bone into the fibrous or areolar texture beneath it, entering the anterior *mediastinum*. The internal surfaces of all these sinuses were excreting incoherent cellular forms, and when closely examined with a lens, were found red and vascular, covered with muco-purulent matter, mixed with clots and white flakes. The clots and white flakes examined with the microscope were found to be incoherent, cellular, or corpuscular textures.

On opening the chest, the sinus passing through the breast bone was found traversing, by various channels, the areolar texture of the anterior mediastinum, which was extensively changed in character and appearance; it was much thickened, much more red and vascular,

* By the term *old pus*, the reader will understand that I mean *matter* which has been a long time excreted, and in which the corpuscles or cells having broken down, there remains a thick, more or less fluid material, composed of granular forms and molecules.

and the new anormal vessels and textures had evidently been the source whence the muco-purulent matter, the flakes, and clots had been discharged, and to which the external opening of the sinus had given vent. The new and thickened textures, and the coats of the new vessels were examined with a high magnifying power, (750,) and they were generally found softer and more brittle than the normal fibrous texture, and multitudes of incoherent cells were found upon them, and distributed among the remaining fibres of the structure.

The lungs externally were of a deep purplish slate colour, their volume was less than natural, and they adhered firmly to the walls of the chest. On pressing them between the fingers and thumb, numerous hard bodies were felt in their interior, and on making sections, tubercles and cavities containing pus were found disseminated through them. The tubercles were in some places hard, in others soft, and in others they appeared to have degenerated into a completely fluid pus. The cavities in many places had several sinuous communications with each other, the sinuses or channels running through a hardened and consolidated texture totally different from anything resembling the healthy parenchyma of the lung, and here and there air-tubes opened into the interior of the cavities. The textures forming the walls of the cavities bore no resemblance to the normal textures, and when the muco-purulent matter was removed from their free surface, they were seen with a lens to be traversed by numerous long varicose and tortuous red vessels, totally different in distribution and arrangement from any of the vessels of the normal textures. Similar strange vessels were also seen running along the borders of the texture, contiguous to, and bounding the outline of, the tubercles. The coats of many of the smaller vessels, and the textures upon which they were distributed, were examined with the microscope, and found composed for the most part of incoherent colourless cells, mingled with granular matter and molecules.

Fig. III.—A capilliary vessel in the fibrous or areolar texture, (normal.)

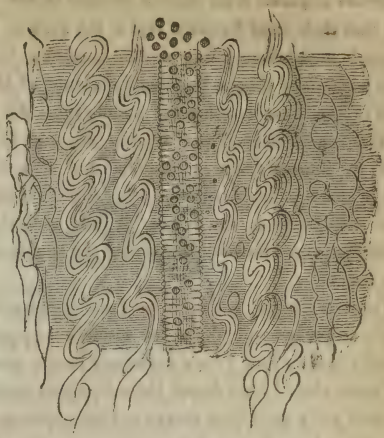


Fig. IV.—A larger vessel in the areolar texture, (normal.)

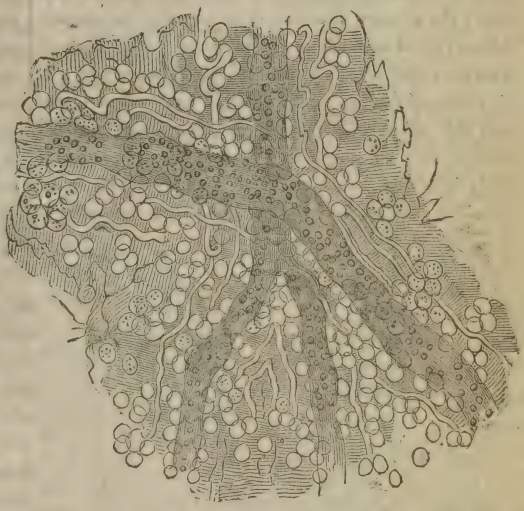


Fig. V.—Vessels excreting pus and mucus, from a scrofulous sinus in the arcolar texture of *anterior mediastinum*. Case 1.

The textures were not tough, coherent, and elastic, but soft, and very brittle ; and it was only here and there that the waved and tortuous filaments, copiously found in all the minute vessels traversing the areolar texture of the healthy lung, could be discovered.

(*To be continued.*)

ON VARICOSE VEINS AND THE ULCERS DEPENDENT ON THAT STATE

By John M. Banner, Esq.
Senior Surgeon to the Northern Hospital, Liverpool.

There are few diseases more painful or distressing in every point of view than ulcers dependent on a varicose state of the veins, and there are few diseases which have occupied the attention of the profession more than this. Much has been written, and many are the modes of treatment recommended. During the period that I was a pupil and house-surgeon at St. George's

Hospital, which extended over the year 1818 and to the end of 1823, more than an ordinary degree of interest existed on the part of the surgeons of that Institution in the treatment of this disease. During that time the ligature was applied to the vena saphena, a portion of the vein was cut away, and a division of the vein was also effected by cutting. Such indeed was the interest excited that we severally partook of it. The same interest has continued with me up to the present day; and from the writings and lectures of Sir B. Brodie, we may conclude that it has continued with him also. The energy and persevering industry of Sir B. Brodie has ever been so great that we cannot feel surprised that he has continued, with unabated ardour, his endeavours to master this troublesome disease, as he has done in innumerable other instances. My interest in this ailment has led me to watch the various means recommended for its cure or alleviation. I have in many instances tested their value. It is the results that I wish to bring before the profession, and though in several of the modes of treatment, from their very marked unsuccessful issue, I have been held back from trying them so fully as I could have wished, where the plan has succeeded in my hands, I have given it a full and fair trial; where it has not done so, or where it has failed in the hands of others, I have contented myself with giving extracts from the writings of those who advocate it. I am unprepared to offer anything new on the pathology of the disease; nevertheless, I have thought it well, before entering on the treatment, to draw attention to certain selections which I have made from distinguished writers, on the pathology and other matters connected with it; this I do without apology, as I consider they will prove of advantage in the contemplation of the subject.

The late Sir Astley Cooper, in speaking of this condition of the veins, remarks that it may arise from a variety of causes; the more immediate one is either a thickening of the valves, so that they are incapable of approximating, or a rupture of the valves. In either case the effects will be the same; the blood pressing in one uninterrupted column, the veins become distended and serpentine, and the valves widely separated from each other; their arteries by their powerful attempts to return the blood to the heart soon excite inflammation. This opinion appears to have been adopted by several other surgeons.

Signor Rima, the Surgeon-in-Chief of the Hospital at Venice, in his "Treatise on the Proximate Cause of Varicose Tumours in the Lower Extremities," states that the real proximate cause is a reflux-motion of the blood in the veins,—for instance, the blood from the femoral vein retreats into the saphena, and is driven backwards from the groin towards the foot, by a power peculiar to these veins. He comes to this conclusion from the following facts:—

1st. When a surgeon removes a portion from a varicose vein in a living person, the blood is seen to spout from the upper end, as it does from an artery.

2nd. In those persons in whom varices have been caused by wearing tight garters under the knee, the veins are remarked to be more distended above the band than below it.

3rd. When the operation for varix is performed, either by the ligature or excision, those varices which are situated below the ligature or excision, are seen to contract and finally disappear, whilst those situated above remain stationary or increase, which would not be the case if the blood in these vessels flowed, as it usually does, from below upwards, as the weight of the column of blood from above acts in such a manner as to paralyze the valves of the veins, and thus keep up the communication between the individual varices.

4th. The pathological anatomy of varicose veins exhibits, in the lower extremities, hypertrophy of the walls, and a structure like that of the arteries. He thinks that inflammation following on a passive dilatation of the weak venous parietes between every two valves, with the weight of the column of blood from above, may be the cause of this hypertrophy; from this, chronic inflammation and thickening follows, and a change of structure.

Andral specifies several varieties of the disease:—

1st. Simple dilatation of the veins, without any other alteration, and either extending all along the vessels, or confined to particular points of them.

2nd. Dilatation of the veins, attended with a thinner state of their coats, and it may be either an uniform, or an irregular dilatation.

3rd. Uniform dilatation, with thickening of the coats of the veins.

4th. Dilatation, with thickening of the coats and interspaces between the varicose enlargements. In the two latter cases, as the vessel increases in diameter, it also becomes elongated and tortuous. This is the ordinary form of varices.

5th. Septa or partitions are formed in the vein, whereby its cavity is divided into small cells, in which the blood accumulates and coagulates.

6th. In the last form of varix, described by Andral, "from careful dissections, there are, in addition to the disposition exhibited in the fifth variety, various irregular perforations in the sides of the vein, and the vessel thus communicates with the surrounding cellular membrane, which is generally more or less diseased, as is exemplified in hæmorrhoids."

Mr. Syme, of Edinburgh, enumerates tall stature and largeness of the veins, as predisposing to this disease; constipation, pregnancy, and sedentary occupation, favour its actual commencement. Sir Everard Home observed, that in the army the grenadier companies are especially subject to varicose veins. Sir B. Brodie remarks that cooks are very liable to this diseased state of the veins, and enumerates

certain exertions as liable to produce it, and remarks that he has known a few instances where the varicose state of the veins appeared immediately after hard walking. Professor Cooper enumerates tall stature, large size, a long perpendicular course of the veins, as predisposing causes to the disease.

It appears to me that there must exist a predisposition to this disease in the person affected,—some peculiarity in the structure of the veins,—my experience does not bear out the observations of several writers, that persons of tall stature and large frame are the most liable to this disease. I have remarked that those of short stature and spare habit are also much affected with it. When Sir Everard Home stated that the grenadier companies are very liable to varices, he should have added also, that soldiers are subject to hard walking, which is given as a cause of this disease by Sir B. Brodie, and that they, in the days of Sir E. Home, wore the garter and knee-breeches, which, according to Signor Rima and Sir B. Brodie excite the varices. In the many cases which have come under my care, I have found that those who have undergone severe exercise of the lower limbs, whether they be tall or whether they be short, have been the subjects of this disease, and have had occasion to remark that many of the footmen in London are subject to it, those more particularly who were required to show a good leg and had to stand many hours together poised on the toes behind carriages. These men garter tightly, and where the predisposition existed, the practice no doubt acted as an exciting cause. Those subject to an exposure to great heat (as for instance cooks and foundry men,) I have observed are very liable to it. What is it then that causes this predisposition? According to Sir B. Brodie, the disease has been produced immediately after hard walking, proving at once that the coats of the veins were weak and easily dilated, or that the valves were defective; and the fact that many of the persons afflicted, have one vena saphena only diseased, proves that tallness of stature, largeness, and heat, do not entirely produce the disease. And again, many hundreds under exactly the same influences, escape the disease, which to my mind would at once prove a predisposition to it in certain individuals, which from an excitant developes itself. Women having children are subject to an enlargement of the saphena and its branches; in the several cases which I have met with, the varices disappeared at the seventh month of parturition, proving that the diseased state before alluded to did not exist. I recollect one case in particular in which a lady was seized suddenly at the fourth month of pregnancy with great pain and stiffness in the legs. On examining them I found the superficial veins generally distended, and the limbs presented a bluish appearance; the feet were cold. In this case the veins were not tortuous nor knotty; they felt generally distended. This state continued until the seventh month, when the limbs resumed their natural appearance, and continued perfectly well until the lady was again four months advanced with child, the varices then re-appeared, and disappeared as usual at the seventh month. This effect has been produced on four successive occasions, and in every instance the result has been the same. I have met with three similar instances. I fancy that when Andral enumerates a simple dilatation of the veins as a variety of this disease, he must allude to such an instance as those I have referred to, and which can scarcely be considered a true state of varix.

That there is some peculiar predisposition to this disease is manifest from the fact that it very frequently happens that the saphena vein in one limb is alone affected, which would scarcely be the case if it depended only on the causes enumerated. A patient came under my care in whom there was a large cluster of varicose veins on the inside of one knee, forming a tumour as large as an egg, which she stated came suddenly during parturition, and has continued slightly increasing for eight years. This is the only part affected.

The veins most liable to become varicose are the spermatic, hæmorrhoidal, and saphena. These veins, from the peculiarity of their situations, are liable to be acted on by pressure, therefore we may conclude that pressure has much to do in rendering them distended, knotty, and tortuous. I am not prepared to state what the exact condition of the vein may be prior to the varicose state; there can be no doubt that a diseased action exists, most probably in the valves. We seldom have our attention drawn to the stage of the complaint alluded to; when applied to we usually find the vein tortuous and enlarged, accompanied with an ulcer in the leg, and where we have an opportunity of examining the parts after death, we find the vein enlarged, elongated, and thickened, more generally thickened at interspaces. In some instances the coats are unnaturally thin, in others the valves are widely separated; in some they appear too small for the calibre of the vessel, and occasionally we find them ruptured. The superficial veins are, in almost every case, considerably enlarged.

In contemplating the various modes of treatment which have been adopted by those writers who have distinguished themselves for their laborious researches and high attainments, we may conclude that the essential object they have each had in view has been the most efficacious means of partially or entirely destroying the vena saphena. The ulcer dependent on a varicose state of the vein has appeared to them only permanently curable, through the partial or entire destruction of the vein. This appears to have been the object of Sir Everard Home, Sir B. Brodie, MM. Fricke, Velpeau, Davat, Sanson, Bonnet, and others. Sir B. Brodie has devoted much time and attention to this disease,

and has adopted several modes of treatment; he, with Sir Everard Home, applied the ligature, and with some success for a time, when phlebitis occurring, and death resulting, it was discontinued. Mr. Abernethy, considering that the ligature was the exciting cause of the phlebitis, suggested the mere division of the vein; and Sir B. Brodie and others appear to have availed themselves of the recommendation. In many instances irritable ulcers supervened, and in most the benefit was very transient. Sir Astley Cooper, in speaking of the ligature and division of the vein, remarks,—"It was formerly the practice, when the veins were in a varicose state, to tie and divide them; this plan is pursued by many surgeons, but it is one that I have deprecated in my lectures for many years; it is bad treatment, very injudicious, and fraught with great danger. I have seen this operation prove fatal twice, and if I were to state all the cases in which I have known it terminate fatally, I should recount at least a dozen. Another overwhelming objection is, that when it does not prove fatal, its ultimate effects are perfectly nugatory." Whereas Signor Rima, in giving the results of thirty-four operations, by the excision of an inch long of the vein above the first varicose swelling, states that there were—

10	radically cured.
13	much relieved.
6	slightly relieved.
2	not relieved.
2	deaths.
1	under treatment.

I witnessed this operation performed in St. George's Hospital, where every precaution was taken, and the operation done in a masterly style; nevertheless phlebitis came on, which proved fatal on the third day. The subject was about twenty-five years of age and in the height of good health at the time of its performance. This was the only case in which I have seen the excision of a portion of the vein, and therefore do not feel myself in a position to speak decidedly on its value, yet from the relation of several cases, and the table quoted from Signor Rima, we may conclude that it is far from being free from danger.

It was about the year 1818, that Sir B. Brodie adopted a new mode of dividing the vein with the intent of preventing the irritable ulcers consequent on the old method. The operation consisted in passing a thin-bladed knife for some distance under the skin, over the vein, then turning the cutting surface downwards, draw it across the vein, and divide it. In a very large majority of these cases much good appeared to result, and the operation for some time was held in repute; but I believe in almost every instance after a short lapse of time the disease returned, and Sir B. Brodie has given it as his opinion that the operation is not attended with a benefit great enough to justify its performance, and now recommends, as did Sir Astley Cooper, bleeding from the saphena when necessary, and applying a well-regulated pressure and other palliative means.

M. Breschet tried the plan of pinching the vein with forceps, constructed for the purpose; this plan frequently answered the end of obliterating the vein, but often produced sloughing and ulceration, which in time was cured. The process was tedious. M. Sanson also constructed forceps, with blades so broad as to keep the sides of the vein in contact for nearly an inch. He remarks that it is not necessary to compress the vein with a force to induce adhesive inflammation; it is sufficient to compress the vessel so as to arrest the flow of blood through it, when a clot forms, which ultimately becomes absorbed, and leads to a permanent obliteration.

Sir Astley Cooper, in speaking of the treatment of varicose ulcers, says, "The first thing to be attended to is the recumbent posture, in fact this position is indispensable;" he then recommends mercurial washes and bandages. He also recommends the opening of the veins;—"indeed they are so distended that they may be more properly termed lakes than rivulets." He advises the veins to be punctured twice a week, and speaks of the little danger attendant on the operation. He farther remarks, "if the puncture, however, at any time should not unite, but *fret into ulcers*, you must apply Liquor Calcis."

Lallemand, Davat, and Velpeau, applied needles in the manner recommended by Mr. Phillips, of London, for the obliteration of arteries, and with success so far, rendering the vein impervious for some distance of its course; it is a painful operation, and not always successful.

M. Fricke adopted the plan of fixing the vein under the skin, passing through it a needle armed with a strong thread. This was done at intervals of a few inches, in every vein that it was thought necessary to obliterate. The thread was moved daily in the vessel to excite inflammation, and was removed on the third or fourth day. With M. Fricke this operation was successful, whereas with Velpeau it was very unsuccessful, for out of twelve patients inflammation of the vein took place in all; in three of the cases the inflammation was so excessive that the patients barely escaped with their lives, and the twelfth patient died of phlebitis.

M. Velpeau's method of applying the ligature appears to have been so successful in his hands, that I quote his plan more fully. A strong sharp pin with a large head, and a waxed thread, are the only instruments used. The patient is to be placed in such a posture as will render the veins tumid and prominent. The trunk of the vein is now raised up with the fingers, the pin is passed below the ends of the nails, and underneath the vein. It is necessary to protect the finger with a thimble, for the tissues

under the varicose vein are often very hard and resistant. This process must be repeated with regard to every dilated vein; eight, ten, twelve, or fifteen pins may be required from the foot up to the knee, but, generally speaking, three or four are sufficient. When the veins are free and moveable under the skin, it is easy to pass the pins under them; but when they are applied closely to the bones, this is sometimes impossible; it is then necessary to pass a strong pin perpendicularly downwards, and then direct it obliquely under the trunk of the vein. The pins being all placed, are fixed with threads, by twisting the thread in a circular manner round the pins, taking care to draw it tight. The pins and ligatures are not removed before the sixth or twelfth day, when the tissues embraced between them have been destroyed; but even if the *eschar* be not detached at this period, it is well to remove them, as there can be no doubt but that the vein is obliterated. "The introduction of the pin gives very little pain, but the constriction exercised by the ligature is *excessively painful.* Hence you should commence with the highest pin, in order to cut off the nervous communication as much as possible." The tissues embraced by the ligatures mortify and are separated, leaving a sore, which soon heals up. M. Velpeau further states,—"Of more than one hundred patients on whom I have operated by this method, not one has presented any dangerous symptoms; some slight *external phlebitis,* and the formation of some *small abscesses,* were the only consequences of any moment that ensued. Still I always dreaded that such constant success in this matter would be interrupted by an unfavourable result, and my apprehensions have been unfortunately realized. The only *fatal case* occurred recently."

The plan so much extolled by Velpeau I have seen tried on three occasions; the subjects were young and healthy; the operations were performed by my late colleague, Mr. Wainwright, in a most excellent manner. In the first there were slight symptoms of phlebitis, but which required active treatment to allay. In the second case the symptoms of phlebitis were more acute, and it was with difficulty that the patient was saved. In the third case, a troublesome ulcer formed, the varix re-formed, and the operation was not renewed. I would state that one pin only was applied in each of these cases, and that we never ventured on this operation again.

In the year 1834 a gentleman requested me to operate on his leg. He had been quartered in Dublin with his regiment, and had consulted an eminent surgeon there for varicose veins, and a small painful ulcer. The surgeon suggested the propriety of having the vein destroyed by an application of potassa fusa. As I had never seen the treatment adopted, nor did I at the time know that it had been tried, I put the patient off as I best could. On considering the subject, I thought so favourably of the principle, that I determined to give the plan a trial the first opportunity. It was not long before one presented itself, as in the month of August, 1834, a cook applied to me for an old ulcer dependent on varicose veins, whose case I will relate, as it will suffice to show the manner in which the caustic has been applied by me, and will show also the usual course in the treatment of these cases.

Mary Jackson, aged 53, a cook, of full habit of body, has been afflicted with varicose veins for seventeen or eighteen years, and during the last eight years has suffered from a painful ulcer above the inner ankle. This ulcer has been healed two or three times during that period; it frequently confines her to bed, and renders her very inactive and unfit for her work. The ulcer is about the size of a crown-piece; the skin surrounding it is inflamed and hard. After keeping Jackson in bed for two days, and prescribing low diet, I emptied the vena saphena by raising the feet, and passing my hand along the inside of the leg. A piece of adhesive plaster on leather, with an aperture in it of the size of a shilling, was applied over the vein on the inside, and just below the knee. The potassa fusa was freely rubbed on that part of the integument seen within the aperture in the plaster, until it assumed a dark-brown appearance. A warm poultice was then placed over the whole. I was pleased to find that the patient did not appear to suffer much. On the third day after the application the distension of the vein subsided, and the character of the ulcer improved. On the tenth day the slough came away, and by that time the ulcer began to heal. On the patient assuming the erect position, a cluster of veins was still observable, a few inches above the ulcer. The caustic was applied a little above the cluster, with the same result as before. The distension disappeared, and on the twelfth day the slough separated. This case speedily got well, and two years afterwards, on my examining the leg, the ulcer continued quite well, and the veins appeared more arborescent—that is, the minute branches were more observable than natural.

In the case alluded to there was no untoward symptom, and from the result I was induced to persevere in the plan, and have now treated upwards of forty cases in this manner. I have generally succeeded in healing the ulcer in an unusually short time. My only application to the ulcer itself has been a little wet lint; and I have observed the ulcer produced by the separation of the slough, and the original ulcer, heal about the same time. In two cases, at the time of the separation of the sloughs, hæmorrhage came on to a considerable extent. In both instances the patients refused to confine themselves to bed; with these exceptions I never experienced any unfavourable symptom. In one case the caustic was applied in several different places before the patient quite recovered. In this instance the woman had suffered from varicose veins and a painful ulcer for

twenty-three years; the ulcer had been healed several times during that time, but did not remain healed for a month together. This was decidedly the worst case I ever treated on this plan. It is now nine years since the caustic was applied, and during the whole of that period she has continued well with one exception, and then, after a very hard day's washing, and exposure to cold, she had an attack of erysipelas in the leg, which terminated in abscess and ulcers, which were troublesome to heal. After a few weeks' perfect rest she got well, and has continued so. The varix had followed a severe burn, which occurred when she was fifteen years old.

The minimum age of the patients attended by me was 22; the maximum 78. Of the forty-three cases the shortest time of cure was nineteen days; the longest time 147.

10	were cured in a period averaging from	20 to 30	days.
15	„	„ 30 to 40	„
8	„	„ 40 to 50	„
2	„	„ 50 to 60	„
5	„	„ 60 to 70	„
1	„	„ 70 to 80	„
1	„	„ 80 to 90	„
1	. . . . .	took 147	„

In most of the cases one eschar has been sufficient. Occasionally the caustic had to be re-applied in consequence of the slough not penetrating deep enough, so as to destroy the vein, which can be always ascertained by the patient's rising from bed. In several cases the caustic had to be be applied in more than one place, seldom more than in two places, in one instance in nine places. I have met with one case only that baffled this means, and that occurred in an old man, who had gloried in a bad leg with varicose veins for many years; he had travelled the round of several hospitals, and I suspect used means to irritate the ulcers, for invariably when it was about to cicatrize, I found a greenish slough present itself, which rapidly threw back our attempts. This man left the hospital uncured.

Of the cases enumerated there existed a larger proportion of men than women; they were of various ages, from 22 to 78; the stature was generally middle-sized, and their occupations varied. Of these cases only five returned to me with a recurrence of the ulcer, and enlargement of the vein, and then not until after a lapse of two years, and in one instance not until after the expiration of three years, although they were invariably requested to return, in case the leg became again affected. In several instances I have had the means of knowing that the cure has remained good. In hospital practice there is considerable difficulty in retaining a knowledge of patients after they leave the institution; nevertheless, it is only reasonable to suppose, that out of thirty-four cases treated there during thirteen years, all of whom appeared pleased with their recovery, a greater number than five would have returned, if the disease had recurred. A few weeks ago a man (one of the five before alluded to,) applied to me to use the caustic again; he had been under my care two years ago. He stated that the leg had become painful, and that a small ulcer had formed above the inner ankle. On examining the leg I found several knots of veins, and the ulcer was looking irritable. An eschar was made above the highest knot, when the distension subsided, the pain disappeared, and the ulcer healed quickly.

But supposing that this mode of treatment only acts beneficially for two or three years, is it not superior to any other? It is free from danger; there is no difficulty in healing the ulcers; even those of many years' existence yield to it. Sir Everard Home found it necessary to discontinue tying the veins, and Sir B. Brodie and others deprecate the removal of a portion of the vein. The application of the needles, according to Phillips's plan, and needle and ligature according to Velpeau's, has not answered, without occasionally producing inflammation of the veins, and is acknowledged by its inventor as "very painful," and not unattended with danger. Sir B. Brodie acknowledges the inefficiency of his mode of dividing the vein, and with Sir A. Cooper, contented himself with using palliative measures,—such as the elastic stocking and bandages. The great advantage of the caustic, as a means of destroying the vena saphena, over every other method, is the safety with which it may be used, the facility of its application, and comparative ease to the patient. When necessary it can be re-applied, and this too, in several parts of the vein's course. Cases in which there existed great pain from inflammation of the ulcer and indurated integument, after the application of the caustic became easy and healthy.

Mr. Mayo published a case in 1834, in which he cured a varicose state of the veins in the leg by the application of caustic issues. Sir B. Brodie also mentions having applied the caustic potass in a case without any bad symptoms; he does not state why he discontinued its use. And M. Bonnet, surgeon to the Hotel Dieu, Lyons, has been in the habit of using the kali with great success. The rules he gives for its application are as follows:—

1. Many portions of caustic must be applied on the course of the dilated vein, at intervals of two or three inches.

2. The application should not be made, except in those parts of the veins which correspond to the muscles. The only places where it should be applied are on the superior half of the leg, and inferior half of the thigh.

3. The caustic must be applied at least twice at the same points, in order to reach the vein. This supposes that it is necessary, in order to obliterate the veins, to reach and open them with the caustic. In no case

after the first application, which only destroys the skin, and a little cellular tissue, has the flow of blood been found to cease in the veins; and they are never found converted into a hard cord, impermeable to the blood. It is only after being opened that these changes occur. M. Bonnet has not even once seen a tendency in the inflammation to propagate itself along the course of the veins, although three or four applications of the potass had been made on different parts of their course, and in the greater number had opened their cavity; the inflammation was, therefore, in all these cases, limited by the bands of adhesion, and perfectly circumscribed. These results prove that destroying the veins with caustic potass does not expose the patient to the danger of phlebitis, "and," says M. Bonnet, "finding every-day proofs of the innocence of this remedy, I now take no other precau- than that of confining my patients to bed."

It is a question for the consideration of surgeons whether it were better to make a sufficiently deep eschar on the first application of the caustic, so as to destroy the vein, or to apply it a second time, as recommended by M. Bonnet. I have found it necessary in a few instances to apply the caustic a second time, but in a very large majority of them the eschar was sufficiently deep by the first application to destroy the vein, indicated by its becoming converted into a hard cord-like substance. Whenever I found the vein continuing pervious, which is denoted by its continued distension, I re-applied the caustic. I have only found it requisite in ten cases to use the caustic, as recommended by M. Bonnet, at several parts of the vein; in five of these it was necessary to use it in two places; in two it was applied in four places; in two in three places; and in one in nine places. I do not advise its application at intervals of two or three inches at several parts of the vein, as adopted by M. Bonnet. Where the first application is sufficient to take in the vein, it is usually found sufficient for the cure. It may be requisite to apply it in more than one place, but this forms the exception to the rule. When the slough comes away, a healthy ulcer is left, which usually heals by the simplest means, and generally at the same time with the original ulcer.

ON THE PHYSIOLOGICAL ACTION OF INHALED ÆTHER.

By J. Black, M.D., Physician to the Manchester Union Hospital.

The remarkable, and, we may now say, the popular, adminstration of æther, by inhalation, for producing insensibility to pain, during surgical operations, and some idiopathic afflictions of the body, has been put to a very general trial throughout the kingdom. The result, according to the numerous reports, has been, in the great majority of cases, declared satisfactory, and in many cases so successful, that the process has been pronounced in several quarters, as the discovery of discoveries of the nineteenth century, and as one of the greatest blessings to suffering humanity. It is true that some cases have been reported unsuccessful, and a few others have been candidly represented as either fatal in the result, or followed by injurious effects.

Amidst all these generally favourable and exceptionable reports, although mostly given with practical detail, I have, as yet, seen no scientific solution of the *modus operandi* of this novel application of æther on the animal and sentient organism, and scarcely any attempt at a rationale of the process. Some have stated that the physiological action is narcotic; others sedative, while the majority of those who have touched the question, have compared the effects of inhaled æther with those of intoxication from alcoholic liquors, or the Indian hemp.

After so much practical experience of the visible effects of this remarkable process, it may not be considered premature now to examine some of the essential conditions of the question, to see whether we can approach to any fair physiological solution of it.

In the first place we have the chemical substance, rectified sulphuric æther, long known and used in medical practice as a quick diffusible stimulant and antispasmodic. It is a compound of carbon, oxygen, and hydrogen, and has a specific gravity of 0.750 at 40°, and 0.715 at 60°, according to Dumas and Brande. What is its more peculiar property is the density of its vapour, being at the mean pressure and temperature, as 2.58 to air, as=1. The elastic force of its vapour is another property of most important consideration, being at 54°, Fahrenheit=10.3 inches of mercury, at 64°=15, and at 96°=30 inches, gradually increasing in tension, till at 212° it has a force of 240, according to Dalton; it, moreover, boils under a pressure of 30 inches, at 98°, Fahrenheit.

Let us next examine the conditions of the subjective part of the theorem—the animal lungs and body, to see if there is any physiological path for us safely to follow. The human body has a temperature, varying from 98° to 100°, and we may consider the lungs, immediately after expiration, to be about either of these temperatures. The temperature of the æther inhaled has been at various degrees, from what is called temperate, up to 75°. On this difference of temperature depend greatly the physical and other effects of the æther vapour on the tissue of the lungs, and its ultimate force on the sentient brain. According to Dr. Snow, air, saturated with the vapour, at 54°, contains about one third of its bulk of vapour, and at 75° it contains more than one half. The simple result then of inhaling this vapour, at whatever degree of saturation, will be to increase its elastic force or excentric pressure, from 15 to 30 inches of mercury, if it is inhaled at a temperature of 64°. If taken at 75°, at the full point of saturation, the practical increase of elastic force will not be very much less. There can be no condensation of this vapour in the lungs, for even if imbibed in a liquid state, the heat of the body, at 98°, would soon throw it into vapour, that temperature being its boiling point, which is a very curious coincidence.

From these conditions, excentric pressure must be, with greater or less force, made on the air-cells of the lungs; it may be hazardous to calculate the amount

but it must be great. The question now is, upon what tissue is this increased elastic pressure expended to produce the phenomena of *ætherization*, among which, insensibility to physical pain and suffering is the most conspicuous? Is it chiefly or solely through the channel of the blood-vessels or the nerves of the lungs, that this exaggerated pressure or irritation is conveyed to the *sensorium commune?* for it appears that the physiological climax is there exploded.

To solve, in some approximative manner, this point, and to see how far the law of *endosmosis* might be concerned in the first part of the process, I inclosed, at the common temperature, some rectified æther, in a piece of recently killed lamb's small intestine, which, after being firmly secured and made perfectly tight by ligature, was found to weigh two drachms, including the contents, which only filled one half of the cavity to allow of safe expansion. This little sac of æther was, with the assistance of Mr. Hallsworth, apothecary of the Union Hospital, immersed and kept down in a vessel, containing about six ounces of blood, freshly drawn from a healthy adult, and which was placed in another vessel of water, kept at the temperature of 100° Fahrenheit. The sac of æther was gently kept under the surface of the blood by a stiff feather, without agitation, and being withdrawn after ten minutes, was washed clear of blood, and cooled down to its temperature before immersion, when it was found to have lost fifteen grains, or about one-eighth of its former weight. This loss was entirely of the æther, for the gut-membrane was the same as before; it was still tight to liquid æther, and therefore the loss must have been by *exosmose* through the gut-membrane. Besides, the blood at the end of the experiment smelled strongly of æther.

This rude and simple experiment may be taken for as much as it is worth, but I cannot help considering it as very much countenancing the view, independent of a *priori* probability or reasoning, that the vapour of æther, through the elastic pressure which it exerts, permeates the walls of the air-cells of the lungs, becomes absorbed by the blood currents, is thence conveyed directly to the heart, and so quickly carried in a direct stream to the brain. All this may be done in less than ten seconds, according to the experiments of Mr. Blake on the transmission of poisons by the blood-vessels. After the vapour reaches the blood current, its elastic pressure is still kept up, if not increased, by the heat of the heart and other internal tissues. This adventitious force will at most, only increase the reaction of the central organ, and distend, more or less, the elastic calibres of the efferent vessels; but when the distending agent reaches the brain in the current of the circulation, this elastic force meets with a counter pressure in the resisting case of the calvarium; its tension will therefore become increased, and the consequence will be, the cerebral mass will suffer pressure, even to paralysis of some of its functions. This adventitious pressure being, however, occasioned by elastic vapour, and not by fluids, however attenuated they may be, as alcohol, it may not, and does not seem in general to lead to any serious or permanent lesion; in most cases the brain soon becomes relieved by the dispersion of the very permeating vapour throughout the tissues, if not by its decomposition.

Professor Christison mentions two cases where inhalation of sulphuric æther produced,—in one, intermitting lethargy for thirty-six hours, with depression of spirits and lowness of pulse; and in the other apoplexy for some hours, and the person would have perished had he not been discovered. Brande appears no farther acquainted with its physiological effects than that "it produces a remarkable species of intoxication when its vapour is respired, mixed with air."

It is unneeessary to advert much to the actual phenomena that occur after inhalation, as corroborating the views of excentric pressure and distension obtaining in the heart and blood-vessels, with more or less corresponding irritation. We witness, where the process has been successful, frequency and softness of the pulse, swelling and general fulness of the vessels of the neck, head, and face, with laborious breathing, congestion of the eyes, and dilatation of the pupils. It would appear that in many cases, while there seemed to be perfect insensibility to pain, and a suspension of all voluntary movements, yet a consciousness of the surrounding objects and operations remained, rendering this state very similar to that of the mesmeric trance. This appears to be the most difficult part of the question to solve, and requires the most refined analysis for explanation.

Not to leave the solution of this very interesting point altogether unattempted, might not the partial dislocation of nervous function be occasioned by the newly imbibed pressure on reaching the encephalon, being at first and for a time, expended on the base of the brain, which is more immediately in contact or connection with the arteries that convey the blood directly from the heart. The sensory ganglia are here also more exclusively located, and will first suffer suspension of their functions; but if the blood has taken up an undue charge of the elastic vapour, or if inhalation be continued too long, or if the subject is of feeble resistance, the whole parts and functions of the brain will suffer, and enervation, apoplexy, or death, may follow.

Without intruding farther upon your columns at present, I have only to say, that as the whole subject is full of interest, it is very desirable to withdraw it as much as possible from the domain of speculation into that of science; and if the few observations which have here been made tend to provoke some more exact and experimental researches on this engrossing subject, the writer will feel gratified to see the physiology of the matter placed upon a more satisfactory basis than it is at present.

Manchester, March 15, 1847.

ON THE EMPLOYMENT OF NUTRITIVE ENEMATA.

By Kenrick Watson, Esq., F.R.C.S., Stourport.

The following cases may perhaps be interesting to some of the junior members of the profession as shewing the confidence which may be placed in enemas in those cases, in which either from severe injuries of the throat or fauces the power of swallowing is lost, or on account of irritability or exhaustion the stomach rejects whatever is swallowed. I am very

well aware that there is nothing new in these cases, but I am convinced that life may be frequently prolonged by the simple means which were used in them.

Case I.

———, aged 40, was in the fourth month of her pregnancy. She has had seven children born at the full period, and abortion has taken place upon several occasions. Once or twice after the expulsion of the placenta she has suffered from profuse hæmorrhage, and her life has been saved with difficulty. The abortions have likewise been attended by profuse discharges. When pregnant, she has always been apprehensive that she should die from flooding when she was delivered.

Upon the 10th of January, 1847, she travelled for a short distance upon a rough road, which she complained made her feel very uncomfortable, and upon the night of the 12th she was very much alarmed by the appearance of hæmorrhage from the vagina. I saw her at noon, a few ounces of blood had been discharged, perhaps about four, but it had ceased. It was evident from the state of the os uteri that abortion would take place, and the usual precautions as to posture and temperature were had recourse to. As she had a violent cough, a few grains of hemlock and Dover's powder were directed to be taken at night, and a solution of Epsom salts in infusion of roses in the morning.

No material change took place until the 23rd, when about nine at night a considerable discharge took place. I immediately plugged the vagina, applied ice externally, and gave her a dose of ergot of rye. She began to yawn frequently, and shortly afterwards the pulse ceased at the wrist. Brandy was freely administered with ammonia and opium; but the pulse very shortly became imperceptible, though during the space of an hour it revived a little occasionally from the stimulus of the brandy. Warm bottles were applied to the extremities and to the epigastric region, and mustard plasters to the feet and cardiac region. The hands and arms were deadly cold; there was no pulse at the wrist; the carotids beat firmly, and the brain retained its integrity except for a few minutes, when she complained of being deaf. About this time slight uterine pains occurred, followed by vomiting, the plugs were forced from the vagina, and the fœtus and secundines expelled. A pint of milk, in which an ounce of isinglass was dissolved, was injected, and directed to be repeated every six hours. The anodyne was repeated.

About three o'clock she began to vomit, and from this time till nine on the night of the 24th nothing remained upon the stomach, and there was no pulse at the wrist during the whole of these eighteen hours.

At the suggestion of Mr. Cole, of Bewdley, who kindly assisted me in the treatment of the case, it was proposed to have recourse to transfusion, but the objections of the patient were so decided that it was considered that the alarm might be immediately fatal to her.

About three o'clock vomiting again took place, and from this time the stomach retained no nourishment; the injections were well retained and were regularly repeated. The natural warmth gradually but regularly returned, and an effervescing draught remained upon her stomach, and then a tea-spoonful of brandy, and during the night three spoonfuls of beef-tea.

In the morning the pulse could be counted, about 130. She continued to take nourishment, the injections were continued,—sometimes of broth, at others isinglass and milk; her pulse became regular, and she gradually recovered.

Case II.

Ann Randal, aged 70, after having made three previous attempts at self-destruction, cut her throat with a razor upon the 16th of April. The os hyoides was separated from the larynx; there was no large vessel divided, and the patient was in a quiet manageable state. Two stitches were passed through the integuments, and the chin fixed in a proper position. The discharge of saliva from the wound was so great that no dressing could be retained, and the discharge was removed from time to time by a sponge.

As she had quite lost the power of swallowing, a pint of milk was conveyed into the stomach through an elastic tube, and an enema, containing an ounce of isinglass, dissolved in a pint of milk, was directed to be injected every eight hours.

The next day she objected so very much to the passing of the elastic tube that I determined to try how long she could be supported by enemas, and from that day, until the 16th day of May, she never swallowed a morsel or drop of any description, unless it was saliva; on that day she swallowed a little milk, which was daily increased, but still she continued to depend principally upon enemas, as a means of support, for several weeks. No union took place between the lips of the wound, and it granulated so very slowly that she continued under treatment until the 26th of July.

During the whole of this period her general health continued good. The enemas occasioned no irritation, and occasionally it was necessary to give an aperient enema. In case the bowel should become irritable, an injection of starch and opium was directed to be used.

Stourport, February, 1847.

CASE OF FALSE PUPIL.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

Sir,

The accompanying case occurring at Southam Infirmary, appears to me to be of some interest in reference to the physiology of the iris, with which, notwithstanding all that has been done, we are hardly yet sufficiently acquainted. Should you think it likely to gratify your readers, it is much at your service.

I am, Sir,

Yours truly,

HENRY LILLEY SMITH.

Martha L——, aged 13, admitted Feb. 22nd, 1847. The right eye presents the following appearances:— The pupil is not correctly circular, seeming as if

flattened on its superior margin, but its form to a certain extent varies with the degree of dilatation. The pupil contracts under the influence of light, although more sluggishly than in the healthy eye; it expands freely on the application of belladonna.

At the upper part of its ciliary circumference the iris is detached, forming a *false pupil*, which, when most dilated, is in length about the eighth of an inch, of a fringed irregular form, resembling the opening made when a curtain is partially torn down. This false pupil varies much in size, being scarcely observable when the natural pupil is dilated, but enlarging when the natural pupil contracts. The false pupil is also, though not to a great extent, affected by the application of belladonna.

When the natural pupil is covered as much as possible, and the upper eyelid raised, light can be discerned through the false pupil.

The vision of the right eye is nearly lost, so that she can rarely distinguish the bars of the window, and on being shown a book printed in large type can make out only a number of black spots. No opacity is discernible in or behind the lens. On using the cat-optrical test, the three images are seen. Has no pain, ocular spectra, nor muscæ volitantes.

This state is the result of a blow from a stone thrown at her when an infant. She has had no useful vision since, and lately the obscurity has, she thinks, increased.

There is strabismus convergens of the right eye. The left eye is healthy; the iris is of the same colour as that of the right, and the eye being opened or closed produces no effect on the opposite eye.

CASE OF POISONING BY THE TINCTURA FERRI SESQUICHLORIDI.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I know of only one recorded case in which an accident precisely similar to that which I am about to relate has happened; and as in that one the result was different, I think you may consider the following worthy of insertion in your valuable Journal.

Yours ever faithfully,

THOMAS EDWARD AMYOT,

M.R.C.S.L, &c,

Diss, Norfolk, March 13, 1847.

Mrs. ———, a young and healthy married lady, swallowed one drachm and a half of the tincture of muriate of iron, in mistake for a common aperient draught, which was standing on the same table, on the morning of December 15th, 1846. I should observe that she had taken an aperient pill on the preceding evening, which, together with the draught, was ordered for a slight mumpy inflammation from which she was suffering. Immediately after swallowing the tincture she threw back the greater portion of it, and violent retching continued for some time. An emetic, and warm milk, sugar, and water, were shortly afterwards given, but owing to the great swelling of the glottis, but a small quantity of them was swallowed, and their effects were therefore inconsiderable. Violent retching and coughing, especially on attempting to swallow, recurred at intervals.

Mistura Cretæ was given with a view of neutralzing the excess of hydrochloric acid in the tincture, and of converting some portion of the salt of iron into the less active *carbonate*, but probably none of it reached the stomach. Leeches were next applied to the throat, and mustard poultices to the stomach and between the breasts, with relief to the symptoms. Heat and dryness of the throat, and pricking sensation along the course of the œsophagus and stomach continued, however, and in the afternoon a quantity of dark grumous blood was vomited. The bowels had acted twice in the day, (probably from the aperient pill,) but the motions were not seen. A dose of Liquor Opii sedativus was given at night, and the patient had some sleep.

December 16th. Symptoms much as yesterday; pulse 100 to 110, irritable; tongue slimy and brown towards the root. A large motion, knotty, black, and with much mucus. Continue chalk, soda water, milk food, mucilaginous drinks, and opiate at night. The vomiting continues. Scarcely anything swallowed.

17th. Not much sleep last night; retching and tenesmus to-day, but no motion; catamenia appeared; pulse the same; tongue a little cleaner. Repeat the opiate if necessary.

18th and 19th. Symptoms much the same; on the 19th, however, the patient was much troubled with cough, and expectoration of clear frothy mucus. A mustard poultice was applied to the course of the trachea and œsophagus; and the bowels having been but very slightly moved on the 18th, with a knotty and dark motion, an ounce of castor oil was used as an enema, and produced four motions, the last of which was loose, plentiful, bilious, and untinged by iron. During the last two nights the patient has slept but little.

31st. Since the last report no unfavourable symptom has taken place; occasional injections of castor oil have been resorted to, and the diet has been most strictly limited to arrowroot, sago, milk, broth, and light farinaceous puddings. To-day a few oysters were allowed. My reasons for insisting on this strict observance of diet will be understood by any one who will read Christison's case.

January 15th, 1847. All has been going on well, and the patient may be considered quite recovered. Two days since a little blood was seen in a motion, but there is every reason to believe it proceeded from hæmorrhoids.

March 13th. Quite well.

Remarks.—The case mentioned by Christison and quoted by Beck, was that of a gardener, who swallowed exactly the same dose of the same preparation as in the above instance, but he seems to have retained it for a longer time on the stomach. In three weeks he returned to his work, but in two weeks more he became emaciated, cadaverous, suffered from pain and *costiveness*, and died six weeks after swallowing

the tincture. It is stated that remedies were applied, but their nature is not mentioned. The pylorus was found "greatly thickened with a cicatrized patch, three inches long and two broad, and another large inflamed spot."

Now although Christison mentions this tincture as a *violent poison*, it is not spoken of in any of the poison charts I have seen, and the only direction as to treatment I have met with is in Pereiras's "Materia Medica," where "*the same as for the mineral acids*" is advised. (I should say that I have not Mr. Taylor's book at hand.)

But besides the treatment applicable to poisoning by the mineral acids, viz., the administration of chalk, magnesia, the carbonated alkalies, milk, white of egg, &c., the symptoms above related seem imperatively to call for the long continuance of mild diet, the repeated use of castor oil enemata, and great watchfulness of the case for at least a month or six weeks; or in other words, *the disposition to obstinate costiveness, even long after the patient seems convalescent, and the progress of inflammation and ulceration in the pylorus five or six weeks after the poison has been swallowed, should be well borne in mind.*

I should have observed, that in the case of the lady detailed above, the catamenia appeared before their proper time, and were possibly hastened on by the iron; and that owing to their presence and to the black colour of the motions, it was not easy to say whether any blood came from the bowels. I *think* there was some in the first evacuations.

[Mr. Taylor mentions a case reported to the Westminster Medical Society, in November, 1842, where a girl, aged 15, five months advanced in pregnancy, swallowed an ounce of the tincture of muriate of iron in four doses in one day, for the purpose of inducing abortion. Great irritation of the whole urinary system followed, but this was speedily removed, and she recovered.—Ed.]

ON SIMPLE ACUTE INFLAMMATION OF THE MEMBRANES OF THE BRAIN IN INFANTS.

By Dr. Rilliet, of Geneva.

(Translated for the Provincial Medical and Surgical Journal.)

(Continued from page 153.)

MORBID APPEARANCES IN OTHER ORGANS.

Spinal Marrow.—The inflammation sometimes extends from the membranes of the brain to those of the spinal cord. It is to be regretted, however, that in the cases of autopsy which we have at our disposal, the examination of this part has been exceptional. [The author refers the reader for information on this point, to his "Traité de Maladies des Enfans," t. i., p. 679.]

Thoracic and Abdominal organs.—The most important fact which is elicited by the examination of these ogans in cases of true meningitis is, that tubercles are never met with, although they are universally present in meningitis of the base. Thus, in seventeen autopsies, we did not once meet with them. The same fact appears from the analysis of the cases reported by Senn, whose observations are the more valuable, as the results are given without any pre-conceived idea of the nature or pathological relations of the disease. We therefore consider it justifiable to propound the pathological law,—*that general meningitis, and meningitis of the convexity of the brain, attacks only non-tuberculous subjects; while inflammation of the base, without co-incident affection of the membrane of the ventricles, is exclusively a disease of the tuberculous habit.*.

This law is true in the majority of cases; but as there is no absolute law in pathology, so we may possibly meet with some few exceptions. It may happen, for instance, that inflammation is excited in a tuberculous subject by mechanical injury, purulent absorption, &c., and that in such a case it assumes the characters of true meningitis; but we are convinced that if inflammation arises spontaneously in the tuberculous subject, it will attack the base of the brain; in the non-tuberculous, its convexity, or the entire periphery of the brain.

III. Symptoms.

As the symptoms which are manifested by the nervous system are the most important at all periods of infancy, we shall make them our first consideration.

Headache is a constant and early symptom in children above the age of two or three years; below that age it is often absent, especially in the secondary forms of the disease. This symptom either sets in simultaneously with the fever and vomiting, or precedes these by a day or two. It is confined to the front, and of great intensity, much greater than either in typhoid fever, or the tubercular affection of the brain. Its duration is variable, but seldom beyond the third day.

Intelligence.—The disturbance of the intelligence is also an early symptom, and is never wanting, whether the inflammation be primary or secondary, or at any age. In children of four or five years, disorder of the mental faculties precedes the lesions of motility; the reverse is the case in young infants. The mental disturbance is usually first manifested in an appearance of anxiety and inquietude. The child cannot rest, but changes its position unceasingly. It either refuses to answer questions altogether, or its replies are short and peevish. Subsequently delirium of a violent kind ensues. In some cases, chiefly in very young infants, somnolence or coma precedes the agitation, but most commonly the coma follows the delirium, or alternates with it. As the disease progresses the torpor predominates.

Disorders of Motility.—The most common of this group of symptoms are convulsions. In young infants they are frequently the earliest in the series, and are then severe and repeated. In six infants of from four months to two years of age,—in three, convulsions were the first symptoms; in two, they appeared at a later period; in one, six days before death. In older children convulsions are seldom observed at the

commencement, but are commonly witnessed two or three days before death, or are the immediate precursors of dissolution. They are more commonly partial than general, and are not so uninterrupted in their succession as in younger subjects.

Other disorders of the motor functions replace convulsions when these are absent, or succeed to them when they disappear. Thus in some cases, rigidity of the limbs is noticed during the first or second day; in others, a more or less perfect hemiplegia occurs. Some of these phenomena, such as rigidity of the trunk, with drawing backward of the head, are probably to be referred to an extension of the inflammation in the membranes of the cord.

Organs of Sense.—Intolerance of light and noise exists from the commencement. At a more advanced stage there is strabismus and contracted pupil; still later the pupil is largely dilated and insensible.

Countenance.—In the commencement of the disease, the face is alternately flushed and pale; it then bears an expression of haggard anxiety, or of dulness and stupidity. The child appears to fix its gaze for a few moments upon some object, and then relapses into a vacant stare.

Circulation.—There is always more or less febrile disturbance; the pulse is quick, and the surface hot. Occasionally there is an appearance of remittence in the fever, with concomitant variation in the pulse. In general, a fluctuation in the pulse is a constant symptom. [The author admits that he wants more information on the characters of the pulse in the cerebral diseases of children. He might have found much that he requires in English works on these affections, especially in those of Cheyne and Abercrombie.]

Respiration.—The respiration is generally irregular, and sighing. In some cases it is very rapid.

Digestion.—It is seldom that vomiting is absent in primary meningitis of children above the age of four years. This symptom generally appears on the first or second day, and is spontaneous and frequent. In some cases it continues without respite till the close of the disease. In younger children, and in some cases of secondary meningitis, vomiting is absent. Constipation is a common symptom, but it is neither so common nor so obstinate as in the tubercular form of the disease. As death approaches the belly becomes retracted.

(*To be continued.*)

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF WILLIAM SANDS COX, ESQ.

By Peter Hinckes Bird, one of the Resident Medical Officers.

(*Continued from page* 154.)

Case XXVI.

CATARACT.

William Stephenson, aged 63, iron-roller, admitted April 16th, 1846, into the Queen's Hospital, under the care of Mr. Sands Cox. He states that the sight of the left eye has been lost for nearly two years, and that of the right eye ten weeks. The sight left them both by degrees; was very good previously. Has always been a healthy man.

Present State.—The lens of the left eye presents a dull grey colour, marbled with amber, is of small size, and convex; the margin of the pupil forms a blackish, not quite circular, ring round it; that of the right eye is of a dull-grey glistening colour, with streaks upon it; it is also small, and appears convex; pupil as in the other eye. He can see the lights of the windows in the ward, but cannot distinguish the bars between them, while objects appear misty; cannot see his hands without they are placed in the light; can see them better when placed on one side of the eye; can see the blaze of a candle, which appears misty, but cannot see the candlestick; can distinguish black from white. He complains of no pain in the head or eyes; general health good.

Ordered to have the extract of belladonna applied round the eyes in order to dilate the pupil.

May 9th. Since last report he has had the belladonna regularly applied, but has experienced no relief from it; the pupil is very slightly dilated.

Ordered to have the following lotion dropped into his eyes:—R. Extr. Belladon., gr. v.; Aquæ, oz. j. M. Fiat Lotio.

16th. The drops have been applied regularly, but the dilatation of the pupil is scarcelyif all increased.

23rd. Has continued the use of the drops; the dilatation of the pupil is slightly increased; however, he sees no better.

June 10th. The extract of belladonna has been assiduously applied round the orbits, and the use of the drops has been persisted in, but with no apparent improvement to the sight, or increased dilatation of the pupil.

July 12th. It was the intention of Mr. Cox to have operated this morning, but the weather is at present so exceedingly warm that it was thought proper to defer it for a short time.

August 5th. Mr. Cox operated this morning in the following manner:—The patient being placed in the recumbent position on the operating table, the eye-ball being held steady by an assistant, the left eye was first operated on. The needle was introduced through the sclerotic, about a line and a half from the margin of the cornea, and directed into the posterior chamber of the eye, immediately behind the lens, so as to be visible through the pupil, lacerating the capsule, and depressing the cataract; the eye was slightly opened and the patient stated he could see. The right eye was operated on in the same manner, immediately after the left. The anterior surface of the lens had contracted adhesions with the uvea, which were broken down; the eyelid was also elevated, and the patient declared he could see.

Ordered to be carried and put to bed; to be kept in the dark and quiet; to have also a compress of linen, damped with a cold lotion, applied on each eye. He bore the operation remarkably well.

6 p.m. Complains of pain in the eyes, especially in the left.

6th. Complains of great pain, described as sharp, shooting, in the right eye, extending to the back of the head; also of pain in the left eye, more severe than yesterday; tongue furred; pulse rather quick.

7th. There is a great deal of inflammation in the right eye, but the pain is not so severe; no pain in the left eye; can see well with it, but not so with the right.

10th. Has had an attack of the English cholera, which is now very prevalent; it was soon checked by Mist. Cretæ, with Tinct. Opii. Feels to day quite comfortable; bowels comfortable. Continue the cold applications.

14th. Can see quite well with the left eye, which is, however, rather weak; the conjunctiva of the right eye is still inflamed; can see but very little with it. To keep the room rather lighter. Bowels comfortable; sleeps well.

18th. Sight of the left eye stronger, much improved by the aid of convex glasses; the conjunctiva of the right eye is still inflamed; he can see but very little with it, as the lens has come forwards, and occupied the place of the pupil; health good.

Sept. 1st. Sight of the left eye improved, that of the right one much the same; health very good.

The capsulo-lenticular cataract, of which the above case presents an instance, is generally of large size, and it is therefore the opinion of Beer,* that the liquor Morgagni in an altered state may likewise often contribute. It is by no means uncommon, and it is attended with the following characteristic symptoms:—The colour of the opacity close to the uvea is partly chalk white, partly like mother of pearl, and in many cases both these colours can be distinctly seen disposed one over the other; that of mother of pearl, however, being always most superficial. In this case it was marbled with an amber colour. Exposing of the eye to the most vivid light scarcely causes any motion of the iris, but the pupil is circular, without any angles in it. After the application of belladonna the pupil is long in returning to its former diameter. In this case the pupil formed a line round the cataract, and could not be dilated by the constant application of belladonna. It is not unfrequently the consequence of a slow inflammatory process in the iris, the lens, and its capsule.

Old age may be regarded as one of the predisposing causes of cataract, inasmuch as the disease is of most frequent occurrence in advanced life. Of 500 cataract patients, treated by Fabini, 268 were males, and 232 females; and the ages of these individuals were as follows:—

From 1 to 10 years	14
„ 11 „ 20 „	16
„ 21 „ 30 „	18
„ 31 „ 40 „	18
„ 41 „ 50 „	51
„ 51 „ 60 „	102
„ 61 „ 70 „	172
„ 71 and upwards	109
	500

* Lehre von den Augenkrankheit.

Beer assents to the general correctness of this opinion. The cataract of old people generally attacks both eyes within the period of a few months. In this case more than a year elapsed before the other eye was affected.

In doubtful cases the nature of this affection is sometimes elucidated by its history. Cataract forms without any uneasiness in the eye or head, or any disturbance to the health; glaucoma and amaurosis are often preceded and accompanied by various uneasy sensations and functional disorder.

It was the doctrine of Wenzel, that persons frequently exposed to strong fires, and above the age of forty, were more liable to cataracts than other individuals. The preceding case seems to corroborate this opinion, for from the nature of his occupation, the patient was much exposed to the strong fires of the works. It is sometimes observed to be hereditary. In the *Provincial Medical and Surgical Journal* for August 19th, 1846, an instance is related, in which it occurred in the males of three generations.

The operation is now regarded as the only means of affording any rational hope of restoring the eye-sight of patients afflicted with cataracts. Speaking of genuine cataract, Mr. Lawrence* delivers his belief that no external or internal medicine, with which we are at present acquainted, can alter the condition of the opaque lens and capsule. Dr. Mackenzie† believes that most of the alledged cures have, in all probability, been either instances of mere fibrinous effusion on the surface of the capsule, or else cases of ruptured capsule, in which the removal of the opaque lens has been effected by the solvent power of the aqueous humour; while on other occasions it is scarcely to be doubted that no affection of the lens or its capsule existed, but that glaucoma, with incipient amaurosis, was mistaken for cataract, and submitted to certain modes of treatment, which not unfrequently prove efficacious in restoring to a certain degree the sensibility of the retina.

The concurrent testimony of almost all writers upon the subject tends to prove that the restoration to sight has sometimes been effected in the most hopeless cases, I therefore side with the opinion of Mr. Lucas,‡ that in all doubtful cases, an operation should be tried as a remedy by no means violent or hazardous. When there are cataracts in both eyes, some authors are of opinion that there is no reason why one should not be operated on immediately after the other. If division of the cataract is the operation to be performed, Dr. Mackenzie approves of operating on both eyes at the same time; if extraction, then he deems it best to await the result of the operation on one eye before touching the other. In this case one was operated on immediately after the other.

According to Beer, when the cataract is very firm, or moderately so, both depression and reclination can only be a palliative remedy, for he says that none of these cataracts, after the operation, can be dissolved

* "On Diseases of the Eye," p. 44.
† "On Diseases of the Eye," Edit. 2, p. 698.
‡ "Medical Observations and Inquiries," vol. vi., p. 257.

and absorbed, but must remain in the eye as a foreign inorganized body. He also states that he has carefully examined the eyes of persons after death, on whom depression or reclination had been practised, in some instances, more than two years previously; but in almost all the examples, the lens was found firm and undissolved, or at most only diminished, with or without its capsule. He saw an instance in which a cataract rose again after it had been depressed thirty years' previously; when extracted it was found to be almost ossified. In old persons absorption is exceedingly languid, and the lens often very hard. We know, however, from the observations of an infinite number of the highest authorities in surgery, that if in addition to reclination and depression, the cataract is broken piecemeal, this is not the case, but that they are soon absorbed.

Too much should never be attempted to be done at one time in any mode of couching, for its repetition may be safely and advantageously be put into practice again and again. Mr. Hey* states that he couched one eye seven times before perfect success was obtained. A bolder use of the couching needle is sometimes made than the delicate structure of the eye warrants; when this is done, the structure of the eye is sometimes so impaired, and the consequent inflammation so violent, that the restoration to sight is utterly prevented. Reclination is to be preferred when, together with the objections to extraction, the surgeon has to deal with a fully-formed, *very hard, lenticular*, or *capsulo-lenticular, cataract*, or, with a case of the latter kind, complicated with partial adhesions to the uvea.

When the cataract is partially adherent to the uvea, Beer recommends an endeavour to be first made with the edge of the needle, (which is to be introduced flat between the cataract and the uvea, above and below the adhesions,) to separate the adherent parts before the attempt at reclination is made.

* "Practical Observations on Surgery."

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, APRIL 7, 1847.

A lamentable instance of neglect and consequent loss of life, in which the names of some medical practitioners are mixed up, has lately occurred at Birkenhead. The sufferer was a poor woman in child-birth, and the case became the subject of inquiry before the Coroner's Court. An account of the inquest has been published in one of the Liverpool papers, headed "Alleged Misconduct of the Faculty in Birkenhead," from which it would seem that several medical gentlemen had been applied to and that two had seen the unfortunate woman, but had declined undertaking the charge of the case gratuitously. One of these gentlemen subsequently consented to act on promise of payment, and on finding that the case was a difficult one, procured also the assistance of another practitioner, (Mr. Stevenson,) by whom, after a consultation, the poor woman was delivered. The child was born dead, but the mother appeared to be doing well. Delirium, however, shewed itself on the following morning, recurring at intervals, and in a few days the patient sank. The following verdict was returned by the jury:—"That the deceased died from puerperal mania, or child-birth; but the jury cannot separate without expressing their regret that more prompt and efficient aid was not rendered by the medical men in attendance on the deceased; at the same time they beg to thank Mr. Stevenson for his prompt attention to the deceased when called upon to do so."

It should be stated that the gentleman who consented to take charge of the case called in the evening, and again on the morning after delivery, but not receiving the promised payment declined farther attendance.

We have no intention of discussing the conduct of the medical men who stand implicated with this proceeding. We have not the means of knowing how far the published statement is correct, and judging from the animus shown in the selection of the heading prefixed, we are not disposed to place much reliance upon it; at the same time we would not be understood to screen the medical men from the consequences of the non-fulfilment of the moral obligation which lies upon them to assist a suffering fellow-creature to the extent of their power.

The occurrence, however, is an instructive as well as a distressing one, and there are other parties who may derive a lesson, and may merit reproof, to the full as much as the medical practitioners whose names are called in question. The poor woman it seems fell a victim to the consequences of a natural process, requiring the assistance of a professional man, not on the moment be it observed, but of the necessity for which she and her friends must have been cognizant for months, and yet no provision for obtaining such assistance is made beforehand, and the medical man, whose time is his estate, and his exercise of his professional calling his means of subsistence, is expected to *give* that relief immediately when demanded, and censured by the public for non-compliance. We should be glad to know on what grounds, as far as the public is concerned, he is answerable to the demand on his time, or amenable to the reproof so liberally bestowed? Why is he to be publicly reproved for not bestowing his guinea in the exercise of his calling any more than any individual juryman, or other person, who might have the means at his disposal, for not himself handing out the fee, and thus bespeaking and requiting the service performed.

Let the circumstances of the case be changed, and others unhappily in this day of far greater frequency substituted, and let the inquest be supposed for one moment to have been into the cause of death of an individual or a family, who may have fallen a sacrifice to want of the common necessaries of life; would the jury venture to record a regret that more prompt and efficient aid had not been rendered by any baker or other provision dealer, at whose hands relief might have been sought, or would the account have been headed in a public newspaper "Alleged Misconduct of the Provision Merchants of Birkenhead," or of Liverpool, or of any other place in which such an unhappy event might have occurred? Would they not rather have lamented that the parochial or borough authorities — that is, the public authorities — the authorities to the support of which the public contributes, and over the efficiency of which they have the right of control, had not been more vigilant in the discharge of the duties assigned to them. We deny altogether the right of juries thus to censure the conduct of private individuals, or to dictate the scale on which their benevolence should be exercised, and we greatly question whether there was one individual in the court then present, the medical men excepted, who would not have resented the being called out of bed to give hours of attendance in a case requiring assistance, for which previous provision should have been made, to say nothing of contributing his guinea, or the equivalent of it, on the spot. It is true we find them liberal of their thanks to Mr. Stevenson, for the gratuitous exercise of his professional skill and attention on the occasion, but no expression of willingness on their own part to contribute any portion of their substance towards sharing with Mr. Stevenson the work of benevolence to which he had been devoting his valuable time and his professional skill.

Once more, we are desirous that the tenor and intent of the preceding observations should not be misunderstood. God forbid that the time should ever arrive when the medical profession is not open, heart and hand, to the call of the afflicted, and willing to afford with genuine disinterestedness, all the aid and consolation—professional or otherwise—in their power, to any one who may ask it; but let not the public claim *as a right* from medical practitioners, that professional assistance which it is the duty of the public themselves to see shall be provided for those who stand in need of it, and for which it is equally the duty of the public to see that the professional man who renders it is equitably and liberally remunerated.

Review.

An Essay on the Tongue in Functional Derangement of the Stomach and Bowels, and on the Appropriate Treatment, &c., &c. By Edward Williams, M.D., Cantab., Senior Physician to the Essex and Colchester Hospital. Second Edition. London: 1846. 8vo. pp. 236.

In the examination of patients, under whatever disease they may be suffering, there are no two classes of symptoms more generally inquired into than those presented by the pulse and the tongue. Yet has the former of these—the pulse, been characterized as *fallacisima res*, and the indications afforded by the latter—the tongue, are anything but certain or well-defined. It is true that there are a few prominent characteristics presented by the tongue in various diseases which are strongly marked,—such as the strawberry-tongue of scarlet fever, the thick white coating presented in common continued fever, and the brown, dry, and tremulous state of the organ in typhoid and irritative fevers; but these are indications of a general state rather than of any precise local affection or derangement of the digestive organs, the condition of which the tongue has been supposed especially to point out. To determine, therefore, whether the commonly received opinions as to the indications afforded by the tongue in cases of gastro-intestinal disease are correct,—whether the appearances presented by the tongue can in any case enable us to ascertain the character or type of the local affection, and its precise seat,—is highly desirable, and the attempt here made by Dr. Williams to accomplish this object, in reference to functional derangement of the stomach and intestinal canal, is worthy of every commendation.

It must have occurred to every observant medical practitioner, to notice cases of urgent dyspepsia in which the tongue presents little or no deviation from the state of health, and again to find the same organ foul and variously coated with vitiated muco-secretions without any corresponding general disease or local gastro-intestinal affection. The indications afforded by this organ, therefore, are no more singly to be depended on, than are those afforded by the pulse. This is only one instance among many others, that no single symptom or class of symptoms, however useful in directing the attention towards particular organs or conditions, can be safely trusted as pathognomonic of disease. An examination of the numerous tables with which Dr. Williams has illustrated his work, affords ample proof of the justice of this remark. It is only then by the numerical method, here as elsewhere, that we can arrive at the *comparative* value of any particular character or symptom, as indicative of any special condition. No one character it would seem, is *absolute*. The most general may be occasionally absent when the disease which it is presumed to mark

actually exists, or occasionally present when the morbid condition itself does not exist.

We now turn to the essay of Dr. Williams, to ascertain the results at which he has arrived, from an examination conducted on these principles, of the state of the tongue in functional derangement of the stomach and bowels. The work is divided into three parts :—The first part treats of the tongue of gastric functional derangement; the second, of the tongue of intestinal functional derangement; the third, of the tongue of organic change of the lungs and heart.

Previously to referring to the conclusions drawn from the tabulated cases, it should be observed that the author attaches great importance to the state of the papillæ. On a review of his cases he found that "the tongue presented itself under two principal aspects, when the papillæ were developed, and when they were not observable." Farther, it was noticed, "that when the papillæ, especially the filiform and tuberose, were prominent or florid, the gastric symptoms were the most prevalent;"—"that the stomach was especially affected when the filiform or tuberose papillæ were developed; hence 'the tongue of gastric functional derangement,'" and, again, "that disturbance of the intestinal canal was accompanied with certain appearances of the tongue, the papillæ not being observable, and thus originated the 'tongue's aspect in functional derangement of the intestines.'"

In the sixth chapter we find described the appearances of the tongue with a florid, or anemic, or a prominent state of the papillæ, as deduced by Dr. Williams from the tabulated results of his observations :—

"*A Florid Tongue.*—A florid and clean state of the tongue, the papillæ being florid, anemic, or prominent, was attended with gastric symptoms, as pain, nausea, vomiting, acidity, and flatulency; also a sensation of gnawing or faintness, and a sinking feel at the pit of the stomach. The head was but slightly affected, and then only occasionally. Fugitive pains were especially remarked, with an erect state of the pyramidal papillæ.

"When the tongue was florid and furred, gastric symptoms invariably accompanied a florid state of the papillæ; headache was confined solely to the filiform papillæ, and fugitive pains attended the prominent state of the pyramidal papillæ.

"The tongue being florid, furred, and tremulous, showed no decided symptoms, excepting with the florid filiform papillæ, with which giddiness, gastric pain, and nausea, were present, fugitive pains solely accompanying the pyramidal papillæ.

"With a florid and tremulous tongue, head and gastric symptoms were felt when the filiform and tuberose papillæ were florid. The head and gastric pains were more acutely complained of with a prominent state of the pyramidal papillæ, fugitive pains solely accompanying the latter papillæ.

"It seems, therefore, that when the tongue was florid, as florid and clean; as florid and furred; as florid, furred, and tremulous; as florid and tremulous, the papillæ being florid, anemic, or prominent, that gastric pain or irritation was almost solely and invariably complained of, with the further addition of fugitive pains when the pyramidal papillæ were erect."

In the same manner, it is observed, "that when the tongue was anemic, as anemic and clean; as anemic, clean, and tremulous; as anemic and furred; as anemic, furred, and tremulous, the papillæ being florid, anemic, or prominent, that gastric pain or irritability was chiefly complained of, the head symptoms being slight, and only occasionally felt, fugitive pains attending the prominent state of the pyramidal papillæ,"—and "that a furred, or a furred and tremulous tongue, the papillæ being florid or prominent, not anemic, was accompanied with gastric irritability, and occasional headache; and with fugitive pains, the pyramidal papillæ being prominent."

"The tongue being tremulous, the papillæ being florid, was accompanied solely with gastric symptoms. An anemic or prominent state of the papillæ not being observable under such lingual aspect."

The preceding quotations will afford some idea of the manner in which the author has carried out his object. After the same manner are described other aspects of the tongue, the tabular record being first presented, then the numerical summary, and lastly, the deductions; some observations on the indications of treatment being occasionally appended. How far the more extended experience of the author, and the observations of others who may take up the subject, may tend to establish, define, or modify, the conclusions arrived at, time will show best. It is obvious that Dr. Williams has bestowed no ordinary pains in the observation and recording of his facts, while by throwing them into a tabular form, and indicating the results deducible from them, he has made them readily accessible for the purposes of study and comparison to all who may feel interested in the subject.

We have only farther to observe in commending the work to the consideration of our readers, that the large print, interspacing, wide margins, and occasional blank pages, however refreshing in these days of small type and crowded pages to the wearied eye, are perhaps scarcely what the nature of the subject called for.

Proceedings of Societies.

SHEFFIELD MEDICAL SOCIETY.

Ninth Meeting, January 21st, 1847.

The President, G. TURTON, Esq., in the Chair.

Mr. Jackson laid on the table Hodgson's Engravings of Diseases of the Arteries, in which was a sketch of diseased valves, very much resembling the valves of a heart which was exhibited at one of the early meetings of this session, and reported in the Journal; also Freers' work "On Aneurism."

Mr. James Taylor, of Ridgeway, exhibited a truss, made by himself, which he considered an improvement on one made and exhibited by him to the Society three or four years ago. The improvement consisted in the spiral spring being made conical, and applicable to both sides of the body.

Mr. Thomas exhibited an apparatus for the inhaling of æther.

Dr. Branson exhibited two drawings made by himself, representing the air-cells in the lungs of a sheep.

RHEUMATISM; PERICARDITIS.

Dr. Branson also exhibited the heart of a painter, aged 45. The pericardium was universally adherent, and the heart itself large. The lungs were highly congested and their edges emphysematous. The patient was admitted into the Infirmary, suffering from a second severe attack of acute rheumatism, the former one having occurred five years previously, since which time he had been subject to cough and difficulty of breathing on exertion. The sounds of the heart were very feeble, but no bruit could be heard. On the Sunday week after his admission, he was suddenly attacked with frightful dyspnœa; the rheumatic symptoms as suddenly subsided. The dyspnœa continued unalleviated by treatment till his death on the Thursday following. Dr. Branson exhibited two microscopic drawings of the emphysematous lung, showing the ruptured air-cells.

Mr. Beckett exhibited the kidneys of a pig, a year old, one containing several cysts filled with pus and saline deposits, the largest about the size of a small walnut; the other kidney healthy.

RHEUMATISM; PERICARDITIS.

Dr. Branson exhibited the heart of a married man, aged 37, a gas-stoker in winter, and a painter in summer, who was admitted an in-patient of the Infirmary for acute rheumatism, on the 29th December last, and died on the 7th instant. He had suffered from acute rheumatism five or six years ago. The sounds of the heart were indistinct, while the impulse was preternaturally strong. The case presented nothing remarkable until four days before death, when the rheumatism left the extremities. The lungs were then found congested, there was great dyspnœa, and the patient ultimately died of asphyxia. The pericardium was adherent throughout, and the heart was hypertrophied, a condition in all probability resulting from the first attack of rheumatism. The lungs were in every part excessively congested, and there was some emphysema.

CIRRHOSIS OF THE LIVER.

Mr. Law exhibited the liver of a spring-knife cutter, aged 63. It was a good example of cirrhosis,—contracted, deformed, and of a yellow colour. He was admitted an in-patient of the Infirmary November 6th, and died on the 6th January, 1847. There was no icterus, but he had ascites, hæmaturia, and bloody discharges from the bowels. The urine was specific gravity 1.010, not coagulable. Kidneys healthy.

Mr. Law also exhibited the cervical vertebræ of a man, aged 45, a labourer. There was a fracture passing through the body and arch of the fifth. The injury was the result of a fall at the railway from some scaffolding, some earth also falling upon him. He died in about twenty-four hours.

ALLEGED POISONING BY SULPHURIC ACID.

Mr. Jackson detailed the particulars of a case of alleged suicidal poisoning by a girl aged 18, who stated that she had swallowed about four ounces by weight of concentrated sulphuric acid. She was proved to have procured that quantity at a druggist's shop, but there were none of the symptoms of her having swallowed any, so far as the state of the mouth, fauces, &c., &c., were concerned; in fact, the only symptom at all resembling any of those which result from the taking of this corrosive poison was pain at the region of the stomach. The only vomiting was what was excited by a large quantity of soap and water. From the history of the girl it appeared that she had threatened self-destruction on four other occasions, but had in every one proceeded only to a very slight extent, never seriously injuring herself; but what object she had in view, whether a morbid desire for notoriety or to obtain some point or other by frightening her mother, could not be ascertained. She had been twice confined in a Lunatic Asylum for a short period, and had suffered violently from epileptic fits, but not latterly. She was under treatment in the Infirmary, and on leaving there was again sent to an asylum.

Sixth Session.—Tenth Meeting, February 4, 1847.

The PRESIDENT in the Chair.

Mr. Hunter exhibited the cast of the arm of a mechanic, in which the veins were naturally exceedingly dilated.

STRANGULATED HERNIA.

Mr. Chesman detailed two cases of strangulated hernia. The first occurred in a female, aged 71, very much attenuated, who was seized with occasional vomiting on the 5th of March last. This continued until the 8th, when the vomiting became stercoraceous, and she then applied to Mr. Chesman. He found the abdomen swollen and tender; a tumour small and consolidated, so as to excite some doubt as to its being hernia, but the vomiting was conclusive. The taxis failed and on the following morning the operation was performed. A portion of omentum was found completely concealing, until lifted up, a small knuckle of intestine; both readily returned on the stricture being divided. In a short time after the operation, the patient expressed a great desire to evacuate the bowels, but nothing passed. In a few hours she became very much prostrated, and sank rapidly eighteen hours after the operation. On inspection *post-mortem* the ileum was found to be free. There was no effusion into the abdominal cavity. The bowel was contracted where the stricture had existed, so as hardly to allow the passage of a quill, and the inner coats appeared to have been absorbed, leaving nothing but the peritoneal coat, which latter, opposite to the wound, was perforated by a small round opening. There was great distension with fæculent matter above the stricture. The principal point for discussion Mr. Chesman considered to be the cause of this perforation; whether it had been produced by ulceration or by the probe point of the bistoury, or in the inspection *post-mortem*. In case it had been caused by the bistoury, how far would Key's director be of service in avoiding such an accident?

The other case occurred in a female servant, aged 35,

who, after suffering for some days from occasional vomiting, (she did not know how long,) applied to a medical man, who on examination found that the integument had sloughed, and there was oozing of fæculent matter. In a few days she was seen by Mr. Chesman, who found the parts much in the same state. After a confinement of several weeks, the external opening healed, and the woman recovered without having an artificial anus, and was enabled to go back to service.

The interest of this case was in the fact of strangulation going on to such an extent as to produce sloughing, without causing such symptoms as to require surgical aid before it had reached that point; and in the fact of the intestine having healed without leaving an artificial opening.

OPERATIONS UNDER THE INFLUENCE OF ÆTHER.

Mr. Thomas then detailed the particulars of three operations which he had that morning performed at the Infirmary, in which he had used the vapour of æther by means of an apparatus made by Messrs. Horne and Co., of Newgate-street, London.

The first was amputation of the leg above the knee of a boy, aged nine. The æther acted in two minutes, and the patient declared he had suffered no pain, and did not awake until all was over. The second was the removal of a portion of the upper jaw of a man, aged 38, the consequence of a malignant tumour. The æther operated in three or four minutes. He was not aware of the first incision, but soon became sensible, and was conscious of many things which passed, but did not give evidence of being in much suffering. The third was for harelip, in a girl aged 16, who was overpowered in three minutes, and stated that the first thing she was sensible of was the passing of the pins.

APPEAL TO THE MEDICAL PROFESSION THROUGHOUT THE KINGDOM ON THE "GENERAL MEDICAL ANNUITY FUND."

Gentlemen,—The project for establishing a "General Medical Annuity Fund," for disabled members of the profession, and for widows and orphans, has now been nearly two years before the public. It is true that in the first instance it was designed to form an integral part of the affairs of the "Provincial Medical and Surgical Association," but the meeting at Norwich having decided that it should stand alone, a separate and distinct Institution from that body, it now becomes necessary to reorganize it, and give its independent existence that permanence and stability which its value and importance demands.

The unexpected decision of the Norwich meeting somewhat staggered me, for I had previously felt I was acting under the auspices of the Provincial Association, and that many members of that important body had not only lent their powerful names to the Institution, but had aided its advancement by donations and subscriptions. Still, though I was staggered, I was not paralysed in my energies, nor disheartened as to the final accomplishment of the project, even though it stood alone; for that which possesses in itself an intrinsic virtue, seldom requires foreign aid to sustain it. The human heart, although corrupted by selfishness, and deadened by apathy, has many soft and gentle impulses, which need but the right stimulus to excite into activity, and when excited, a freshness and beauty is given to character, superior to renovated bodily vigour, after the wastings of disease; for "true philanthropy is health of soul."

Although the motives which have impelled me in all I have done in this matter are open to God, and I trust unimpeached by man, I have, nevertheless, felt a delicacy in obtruding myself,—an unwillingness to seem too prominent,—a desire that that which was of general interest to the profession, should find amongst its ranks others who would step forward and bear with me the heat and the toil. I thought if the project was worthy of support, the acknowledged talent of an enlightened profession like ours would be employed in its behalf, and expected, ere this, to have found many advocates; nor have I been altogether disappointed. Mr. Kelson, of Sevenoaks, Kent, has furnished to the *Provincial Journal* a letter, which evinces an enthusiasm worthy his benevolent spirit, and an activity in a pecuniary point of view, which is an unequivocal earnest of his sincerity. If every county in the kingdom would produce a spirit like his, the prosperity of the Institution could not be problematical. My thanks are likewise due to those gentlemen who honoured me with an answer to a circular, published a few weeks back. They have with much kindness encouraged my efforts,—expressed a confidence which is cheering, and, moreover, have promised active co-operation, so soon as they shall be put into a position to become active. This latter promise is more congenial and satisfactory to my mind than all the compliments they have been good enough to pay me, for I feel that counsel and help are essential. It is a gigantic establishment which is contemplated,—a vast Institution, comprehending in its grasp a huge tract of territory, and having for its object a diffusive spirit of benevolence. I therefore trust that many of these gentlemen will give to us their personal presence, at the forthcoming meeting at Northampton; it is worth while in such a cause to make some sacrifice. I am informed, both by the public press and by private letters, that the "General Medical Annuity Fund" has many well wishers, who are at present unknown as its supporters. These gentlemen are in abeyance, waiting the further development of the scheme, and its final establishment, ere they give to it their countenance and support. To such I would remark, "If you think well of the scheme, why hesitate to support it? Your help is most needed *now*, in the early stages of its establishment, when your opinions and your counsel might lead to valuable results. The growth of a tree depends upon the planting: if the labourers fail to loosen the earth, to arrange the fibres, to seek congenial soil and proper locality,—if they neglect to watch and water it, to shelter it from the rude blast, and sustain its

delicate and yielding form from the rough winds which blow upon it, the chances are that it perishes; but if, on the contrary, they combine their powers and unite their skill, in all that be necessary for its sustenance, then shall it take deep root in the earth, rear its majestic form, thicken its bole, and spread around its branches, while its impervious foliage shall shelter from heat and storm, and beneath which they may repose in calm security.

To advance the interests of medical science is a duty we all owe both to the public and ourselves. To watch over the political movements which bear upon our profession, more particularly at a time like the present, so rife with such movements, is equally important; but let not the claims of philanthropy and benevolence be lost in the struggle. Let their still small voice be heard; they speak to the heart, and it should feel it. In this age of general improvement, when the spirit of amelioration is abroad, and societies are established to meet the contingencies of disease and death, and the calamities which accompany such visitations; when the artisan, the mechanic, nay, the agricultural labourer, have combined to furnish help to their distressed brother, and to the bereaved families of their departed fellow-workmen;—can it be endured, that we, who claim for ourselves the advantages of education, the privilege of expanded minds, the influence of moral and religious feelings, and in some measure the pride of clanship—can it be endured, that in pure benevolence and nobleness of spirit, we should be outdone by these? Does the cause of the widow and orphan require either eloquence or talent to plead with enlightened men? Is not the certainty of their fallen condition, when shrouded with poverty and neglect,—oftentimes their utter helplessness, their agony, their privations, eloquence itself? Cannot imagination picture how forlorn and miserable must be that object who, having once enjoyed ease, comfort, and competency, is, from no fault of her own, but from the dispensations of Heaven, thrust from her home and her pleasures to toil for bread, to sink into dependence, or to have her weekly dole from the hands of a parish functionary? It is rank hypocrisy to put a prayer to Almighty God in the venerable ritual of our church, asking *Him* "to defend the fatherless children and widows," while we refuse a small mite from our resources to make the prayer effectual, as far as human means can make it.

The difficulties under which many worthy and intelligent practitioners labour in a pecuniary point of view, render assurance upon their lives often impossible, but admit that a prudent and careful man has paid from his yearly income sufficient to guarantee to his widow a thousand pounds. Now, what is the interest she will receive from this amount? Unless she adopts some speculative mode of investment, (which is always dangerous,) or to obtain large interest, gets security, uncertain as to punctuality of payment, her income from the ordinary funds of the country will scarcely afford a very humble maintenance for herself; but if she have a family, it is obvious she must herself labour to obtain any respectable position, and it may be she is utterly unqualified for such labour. The capital must not be touched, for that capital is designed for ulterior purposes, to place her children in suitable situations, and to enable them in the end to embark in business on their own account. Now, to meet such cases, is the great object and design of the directors of the "General Medical Annuity Fund." An annuity, accruing from such a co-operative institution, would place the widow in a position of comparative independence; but when the average calculation of mortality amongst medical men, as proved by statistical returns, is compared with other professions, the lowest on the scale, the inference is fair that many die before they can have had time to make provision of any kind.

Take the following fact as an example:—"A young physician, respected for his general demeanour, and honoured for his talents, possessing public appointments, with every prospect of obtaining extensive practice, died after a short illness, (a few minutes only,) at the early age of 36, leaving a widow and five children TOTALLY unprovided for." I quote this passage from my esteemed correspondent, to show that I have not drawn my pictures from imagination, but trusted the detail of facts.

The proposition for a "General Medical Annuity Fund" has occupied the consideration of wiser heads than mine. Dr. Percival, in his "Medical Ethics," more than forty years ago, threw out the suggestion, but no one appeared to act upon it. I have quoted the passage in former communications to medical periodicals, but it will bear reiteration. "In the county of Norfolk, and in the city of London, benevolent institutions have been lately formed for providing funds to relieve the widows and children of apothecaries, and occasionally also members of the profession who become indigent. Such schemes merit the sanction and encouragement of every liberal physician and surgeon, and were they extended, their usefulness would be greatly increased, and their permanency almost with certainty secured. Medical subscribers from every part of Great Britain should be admitted, if they offer satisfactory testimonials of their qualifications. One comprehensive establishment seems to be more eligible than many on a smaller scale, for it would be conducted with superior dignity, regularity, and efficiency;—with fewer obstacles from interest, prejudice, or rivalship;—with considerable saving in the aggregate of time, trouble, and expense;—with more accuracy in the calculations relative to its fund;—and, consequently, with the utmost practicable extension of its dividends."*

Some gentlemen have thought a guinea a year subscription would be inadequate to accomplish the object we design. It is scarcely necessary to enter again into this question, for I have met it on many occasions. A guinea a year subscription *will* enable us to fulfil the engagements to which we pledged ourselves;† and should the Institution meet with the patronage it deserves, it *will do much more*, because the liberal and the kind-hearted of the profession will not confine themselves in their philanthropy—we have already

* "Medical Ethics," p. 359. Edition 1827.

† See "Address," &c., published by Churchill, p. 9.

had examples of this fact—nor will the public, when it is properly represented to them, withhold their assistance in furthering so exemplary an object. If our anticipations in these particulars be realized, we may fairly hold out the prospect of better annuities.

It has been stated too, publicly, that there is an objection in sending money to Northampton, and that making application for annuities there, would be inconvenient; but what is the consequence of locality to a "General Medical Annuity Fund," provided the parties who controlled it are men of integrity and honour, and provided the representative system was fully carried out? It will be our great aim to neutralize all objections of this nature. When the project was first mooted, it was done at the annual meeting of the Provincial Association, held at Sheffield; it was received there without a dissenting voice, and a committee for carrying out the scheme was appointed upon the spot. The retiring president of that Association, Dr. Robertson, of Northampton, kindly accepted the office of treasurer, while the directors were all gentlemen chosen for their high standing in the profession, and their known integrity. For my own part, I took the office of Honorary Managing Director, only as an earnest of my zeal, devoting to the cause my time, and the small measure of ability I might possess, being, in short, willing to "spend and be spent" in the noble undertaking. But the institution is now a citizen of the empire, and is ready to take up its abode where it has the best chance of support. I am willing at any moment to yield the feeble protection I have given it to any more efficient guardianship; nor do I believe an objection would be raised by my colleagues to placing it in a position of greater advantage than we may possess. Our object is the final establishment of the "Fund," and we care not who are the parties who shall develop its energies, and spread abroad its usefulness.

The medical profession throughout the kingdom are especially invited to the consideration of this subject. Honorary local secretaries are required in the different counties and districts for furthering the scheme, and we shall esteem it an especial favour if gentlemen will accept the office voluntarily,—that is, will offer their services, rather than wait for an application. Oh! let them remember the greatness of the cause, and the glory of its achievement, and methinks they will not lack in their zeal.

In the early part of the spring, a meeting of the subscribers will be held at Northampton, of which due notice will be given by advertisement in this Journal. In these times of rapid travelling, when railway communication puts distance at defiance, we earnestly hope that many gentlemen will sacrifice to us their time and services on this interesting occasion. A noble superstructure is about to be raised, the foundations of which are love, in its best and purest acceptation, while its hallowed cement is co-operative philanthropy, upon which the blessing of God shall rest, for God will not withhold his blessing, when men "Hear the cry of the orphan, and wipe tears from the widow's eyes."

Gentlemen who are desirous to be present at this meeting, will confer a favour if they will apprize either Dr. Robertson or myself of their intention.

I have the honour to be, Gentlemen,
Your obedient servant,
EDWARD DANIELL,
Newport Pagnell, Bucks, Managing Director.
March 1, 1847.

REMARKS ON THE CASE OF ÆTHER-INHALATION AT THE ESSEX AND COLCHESTER HOSPITAL.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I enclose a few remarks on the late case of lithotomy at our Hospital, as it seems to me that the statement of the case has produced an impression that the immediate cause of death was apoplexy or compression of the brain.

As the æther was exhibited by me, and as I was particularly observant of its effects, and being of opinion the symptoms that attended the inhaling do not bear out such impression, and that the *post-mortem* appearances do not establish Mr. Beckingsale's inference, that "compression of the brain" resulted, I request your insertion of the accompanying observations, and am,

Sir, faithfully yours,
EDWARD WILLIAMS, M.D.
Senior Physician to the Essex and Colchester Hospital.

The æther was inhaled, mixed with a free current of atmospheric air; the mouth-piece of the apparatus, Weiss's, did not completely cover the mouth so as altogether to preclude the external atmosphere; hence the inhaling process was the longer in producing insensibility.

In no stage of the inhaling process was there lividity of countenance so marked as to excite apprehension of cerebral pressure; the aspect was rather characteristic of one in a state of syncope; the pupils were not dilated, and the stertorous breathing was considered by me at the time to proceed from relaxation of the uvula, and from the nostrils being compressed so as to prevent inspiring through them. This view was corroborated by the fact, that on removing the pressure from the nostrils, and on suspending, for a short period, the inhaling process, the stertor or snoring then ceased.

Before the patient was removed from the operating table consciousness returned, and he answered questions put to him relative to his feelings; neither was there observable paralysis, or other symptom of cerebral pressure, from the period of the operation till his death, being sensible to the last.

At the consultation of the Medical Staff, the singularly indistinct action of the heart was remarked. This, with the general prostration, decided us in recommending stimuli and a turpentine injection.

After death the heart was, comparatively speaking,

empty, but the lungs were engorged, the blood being dark and fluid.

That such a state of blood was unnatural, nor an attendant of death from lithotomy, is an admission we feel bound to allow; and when a similar state of that fluid has been found on death after inhaling æther, we deem that the probability amounts almost to a certainty, that the æther was the cause of this fluid state of the blood. Yet we must also observe, that the absence of those symptoms that ordinarily accompany cerebral pressure, the indistinct movements of the heart, and the engorged or loaded state of the lungs, point to the state of the latter organs as the immediate cause of death. But whether this passive congestion is to be attributed to the changed state of the blood, or whether continued insensibility may give rise to local engorgement, remains yet to be determined.

Your correspondent, Mr. Beckingsale, suggests depleting, when *an apoplectic tendency presents itself*. Such recommendation would be judiciously adopted were cerebral pressure observable; but as I argue that such a state of brain, with its accompanying symptoms, did not exist, consequently depletion was not applicable. Still the question arises as to the proper course to be hereafter pursued under a like train of circumstances—namely, with a perverted state of the blood, and with local passive congestion. I apprehend that in transfusion we possess a means of replacing the blood when so depreciated in vitality as to be injurious to the organs through which it circulates, and local congestion must be treated according to the requirements of the case.

Finally, Mr. Editor, we should feel obliged by seeing reported a few of those unsuccessful cases, which have occurred at the Metropolitan Hospitals, as it is only by the accumulation of numerous and carefully observed facts that we may be expected to deduce correct general principles of treatment.

Colchester, March 27, 1847.

APPARATUS FOR THE INHALATION OF ÆTHER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I beg to send you the accompanying diagram of the section of a stop-cock, intended to be used in any apparatus for inhaling æther, by means of which the supply of æther can at once be cut off, and the patient allowed to breathe the pure air, without removing the "clip" from the nose, or the apparatus from the mouth, which it is often inconvenient to do. On the approach of sensibility, the stop-cock merely requires to be turned back, when the patient will again breathe the æther.

Fig. 1 represents the stop-cock arranged for inhaling the æther, and on turning it in the direction of the *large* arrow, it assumes the position of Fig. 2, allowing the patient to breathe the pure air.

I am, Sir,
Your obedient servant,
PROCTER WRIGHT.

Norwich, March, 1847.

Fig. I.

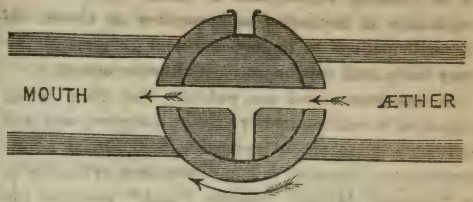
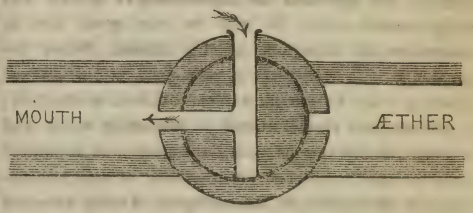


Fig. II.



P.S. I would beg to suggest that if the nose be plugged with some lint, it will be found equally efficacious and much more comfortable to the patient, than closing it with either the "clip" or the fingers. I would also recommend, that the patient should make himself acquainted with the mechanism of inhaling, by practising it before he is brought on the table for an operation, and that the mouth-piece should be made of either horn, wood, ivory, or metal, of the form of a cup, and be just big enough to cover the lips, without interfering with their motion, as this shape will be found more convenient than the large leather pad that is supplied with Robinson's apparatus.

AMPUTATION UNDER THE INFLUENCE OF ÆTHER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

On Thursday, February 25th, I amputated the leg of George Shaw, of Royal George Mills, below the knee. He had been suffering from scrofulous disease of the ankle-joint for some years. On the Tuesday before I made him inhale æther. He was some time before he could understand the method of breathing it; however, he was at last completely under its influence and perfectly unconscious, and remained in that state a few minutes. He was so pleased with it that he asked for "another pipe." On Thursday, in the presence of Mr. W. F. Tuckett, Messrs Blackbury and Barray, surgeons; H. Mackworth, Esq., C. E;. J. H. Whitehead, Esq., and many other gentlemen, he again inhaled the æther and was completely unconscious in less than a minute. I removed the leg four inches below the knee, by the double circular incision; he did not lose one ounce of blood, three arteries were tied, and he was sensible in a few minutes. The stump was allowed to become glazed; the edges were then brought together with one suture and plaster. He was put to bed, he had a little weak brandy and water given him, and an opiate at bed time. On the twelfth day the first ligature came away, and the remainder on

the fifteenth; he has been out daily since, the stump is quite healed, and he yesterday walked with a crutch and stick to my house, a distance of two miles and a half. He states he did not feel anything of the operation, and that his sensations were more agreeable than otherwise.

I am, Sir,
Yours faithfully,
H. H. BROUGHTON.

Dobcross, March 19, 1847.

General Retrospect.

ANATOMY AND PHYSIOLOGY.

NATURE AND SOURCE OF THE CONTENTS OF THE FŒTAL STOMACH.

The source of the nutritious matter which is found in the alimentary canal of the fœtus, is a problem which has never been satisfactorily solved. Harvey looked upon it as derived from the liquor amnii swallowed by the young animal. Geoffrey St. Hilaire having found the same substance in fœtuses with an imperforate œsophagus, very naturally concludes that such cannot be its source. Dr. Robert Lee, who is the latest writer upon the subject, regards the liver as the source, the function of that gland being not only to separate an excrementitious substance, but also to supply an albuminous secretion to the intestines, through the hepatic duct. Dr. Robinson, who has recently investigated the nature and origin of the fœtal intestinal contents, comes to the following conclusions:—

1. That the stomach of the fœtus, during the latter part of its uterine existence, invariably contains a peculiar substance, differing from the liquor amnii, and generally of a nutritious nature.

2. That in its physical and chemical qualities, it varies very much in different animals, being in no two species precisely similar.

3. That in each fœtal animal, the contents of the stomach vary much at different periods; in the earlier stages of its development, consisting chiefly of liquor amnii, to which the other peculiar matters are added gradually.

4. That the liquor amnii continues to be swallowed by the fœtus up to the time of birth; and consequently after the formation of those matters, and their appearance in the stomach.

5. That the mixture of this more solid and nutritious substance with the liquor amnii constitutes the material which is submitted to the process of chymification in the fœtal intestines.

There is, however, no explanation here of the source of the solid matters above spoken of, and Dr. Robinson subsequently states his belief that they are not secreted by the stomach itself, nor by the liver, as affirmed by Dr. Lee; but he thinks it probable that they are the product of the *salivary glands*.—*Monthly Journal of Medical Science*, Febr., 1847.

EXHALATION OF BICARBONATE OF AMMONIA IN RESPIRATION.

Mr. Thomson recommends the following plan for demonstrating the presence of ammonia in the breath:—Air which had passed through dilute sulphuric acid was respired; it was then expired through a tube surrounded with water at 32°, to the farther end of which a vessel was attached to receive the fluid which was condensed. This was acidulated with muriatic acid, evaporated to dryness, and the residue dissolved in a few drops of water. On adding a strong solution of potash to this solution, ammonia was evolved, as evinced by its odour. Mr. Thomson calculates that rather more than three grains of solid bicarbonate of ammonia are exhaled daily by an adult, and thus the quantity furnished annually by London amounts to 150 tons. In this way animals supply ammonia for the support of the vegetable kingdom.—*Medical Gazette*, February 12, 1847.

[The editor of the *Medical Gazette* in remarking upon these experiments thinks that there is a source of fallacy not noted by Mr. Thompson,—viz., the animal matter which is exhaled. This when collected in sufficient quantities would yield ammonia. In order to remove the doubt, he suggests that it should be determined whether yellow arsenite of silver is precipitated on passing the condensed vapour into mixed solutions of arsenious acid and nitrate of silver.]

PRACTICAL MEDICINE.

EXPERIMENTS ON THE COMPARATIVE ACTION OF MEDICINES EXHIBITED BY THE STOMACH AND BY THE RECTUM.

MM. Restelli and Gaetano Strambio have instituted a series of experiments to determine this point, which is not without considerable interest in a therapeutical point of view. The medicines used were strychnine and morphine. A poisonous dose of the former produced in the dog its characteristic effects in twenty-eight minutes when injected into the stomach; in nineteen minutes when thrown into the rectum. The salts of morphine exhibited the same differences. Thus the poisonous symptoms appeared, when given by the stomach, in five minutes and ten seconds; by the rectum in four minutes and sixteen seconds.—*Gazette Médicale*, Fevr. 15, 1847.

[From these results, which were ascertained to be constant in a large number of experiments, it appears that certain medicinal substances act more energetically by the rectum than when given by the mouth; but it must not be supposed that this will be observed in all classes of medicines, as many purgatives for instance are well known to be much less efficacious given by the bowels than by the mouth. As regards the preparations of opium, we may state that we have often procured sleep under critical circumstances, by a dose thrown into the rectum, when repeated exhibitions of the same dose by the mouth had failed to subdue restlessness.]

NEW REMEDY IN PERTUSSIS.

A physician of Ghent has called attention to the Narcissus Pseudo-narcissus in hooping cough. The flower is the part used, which is dried and powdered; the dose thirty grains twice a day.

A surgeon of the same town announces very

satisfactory results from the employment of the mistleto in the same disease.—*Medical Times*, February 20th.

COD-LIVER OIL AS AN EXTERNAL APPLICATION IN OPHTHALMIA TARSI.

Mr. Cossar, of Darlington, in a letter to the Editor of the *Lancet*, states that he has found cod-liver oil beneficial as an external application in the ophthalmia tarsi of scrofulous subjects, having used it in a number of cases with complete success. The oil is to be rubbed on the eyelids three times a day.—*Lancet*, Feb. 27th.

ON THE THERAPEUTIC VALUE OF THE PREPARATIONS OF IODINE IN SYPHILIS.

M. Aran terminates a long memoir on this subject with the following conclusions:—

1. Multiplied experiments establish incontestably that the preparations of iodine possess valuable properties in the treatment of syphilitic diseases.

2. The iodide of potassium is to be preferred to all other preparations.

3. The iodide of potassium is not to be given indiscriminately at all periods of the disease; it is more particularly applicable to what has been termed by Wallace the pustular form of syphilis; it is also specific in the tertiary forms. Its powers in the primary disease are not so well marked.

4. It is, particularly in cases in which mercurial medication fails, or when the syphilitic symptoms are of long standing, that the iodide of potassium should be substituted for the preparations of mercury. Under these circumstances this medicine supplies a want which was long felt by the profession, and which was of most injurious consequences to the patient.

5. It is doubtful whether it is advisable to combine the iodine and mercurial treatment.

6. The inconveniences which sometimes follow the use of the preparations of iodine should not cause us to abandon it, as they may be obviated by its cautious administration.—*Archives Générales*, Janvier, 1847.

SURGERY.

ON THE APPLICATION OF ICE IN THE TREATMENT OF INJURIES.

The application of ice, to a great proportion of severe wounds, is the established practice of several of the most distinguished French surgeons.

In the Hôpital St. Louis, burns are treated in this way, and its application in extensive burns appears to us to be that in which its employment is most strongly opposed to our treatment of the same injuries. "However extensive the surface or the depth of a burn, it is immediately covered with bladders half full of pounded ice, which are fixed by different contrivances, according to the situation of the injured part, and this treatment is continued till the separation of the eschars. If the burn be very extensive, the patient, placed in a sheet held by two men, is plunged into a cold bath."—*Annales de Therapeutique*, Mai, 1846.

Upon this the Editor of the *Edinburgh Monthly Journal* remarks, that it is said that the patient experiences immense relief from this treatment, and that he is comparatively free from pain as long as the body can bear the extreme cold. The bath is repeated frequently. It is believed by the advocates of this treatment that the extent of sloughing of the surface is thus greatly diminished; in other words, that the extent of destruction of the injured parts does not depend on the severity of the original burn, but on the intensity of the reaction which occurs afterwards, and the beneficial operation of the cold, is attributed to its preventing, or in a great measure subduing, this re-action.

However rational the theory, we believe that in practice this treatment of very extensive burns will invariably be found inapplicable. The surface of the body in these cases is in the first place cold, and the patient collapsed and pulseless, and we do not think the most strenuous advocate of the ice and cold-water system would immerse a patient in this state in a cold bath. On the contrary, stimulants must be administered, and the small quantity of caloric remaining in the body is to be preserved by the external application of cotton wadding, and other non-conducting substances. It must be remembered, too, that the shock from an extensive burn is not recovered from so rapidly as that occasioned by most other injuries, and frequently soon after the full establishment of re-action, the separation of the sloughs has commenced, the extent of which we believe to depend entirely on the severity of the original burn, and not on the treatment employed. The application of ice in smaller burns we should think much more worthy of trial; indeed we are aware that great relief is sometimes obtained from its use, and as relief from pain in such cases is one of the best indices of its treatment, the feelings of the patient may very properly guide us in its employment.

In the Val de Grace, M. Baudens uses ice extensively in the cases of wounds, contusions, and compound fractures, and apparently with much success; but this surgeon, not content with the degree of cold produced by the ice, reduces the temperature to a much lower degree (15° below zero C.,) by mixing it with common salt. It is allowed, however, that this extreme degree of cold frequently produces considerable pain to the patient, and a feeling of tightness and congestion in the part; and we should naturally expect such an extreme degree of temperature to prove rather a source of irritation to the part than to act in the beneficial way in which it is represented. By using cold water, and renewing its application very frequently, we probably obtain as low a temperature as it is advisable to apply on most occasions.

We feel assured that the indiscriminate and continued application of ice to wounds and injuries is frequently productive of mischief. We have witnessed fatal erysipelas on several occasions supervene during its application; and in a large hospital in the north of Germany, where this treatment was indiscriminately applied in every case of wound, contusion, and fracture, simple or compound, fatal cases of phlebitis and erysipelas occurred with greater frequency than we have ever seen elsewhere.—*Monthly Journal of Medical Science*, January 1, 1847.

TREATMENT OF PROLAPSUS ANI.

Dr. Hake has made public a plan of treating this occasionally very troublesome accident, which was

suggested to him by a friend who had invented it as a remedy for his own sufferings.

The plan simply consists in returning the bowel, and placing against it a piece of sponge four or five inches long, an inch wide and half an inch thick, rolled upon itself so as to form a pad. The buttocks are then brought as nearly as possible into apposition, and retained in that situation by straps of plaster passed lengthways from one to the other. By this means a very effectual support is afforded to the relaxed bowel. If there is much irritation about the anus the part should be washed with vinegar and water.—*Medical Gazette*, February, 1847.

[We regard this simple contrivance, the effects of which are stated by Dr. Hake to have been equally satisfactory in other cases witnessed by himself, as one of great value, and likely to supersede many more expensive inventions. The benefit derived from it might probably be increased by dipping the sponge previous to application in some astringent solution, as a decoction of rhatany root, or a weak solution of nitrate of silver.]

ON FISSURES AND EXCORIATIONS OF THE NIPPLE.

M. Donné *(Conseils aux Meres sur l'Allaitement)* observes that fissures of the nipple, so frequently observed in nurses, are not to be deemed solely as an inconvenience unconnected with the secretion and qualities of the milk; they have other inconveniences beyond the mere pain which they produce. He does not doubt that they are always related to a defective condition of the lacteal secretions, not less injurious to the infant than to the nurse, and in this point of view he considers them worthy of every attention. He states that he has constantly found that women who are subject to these fissures have a poor quality of milk, and that it is commonly mixed with mucosities. So constant is this connection, that he considers the fissures the indication, if not the consequences, of poverty of the milk, of its being deficient in quantity, and of its difficulty in flowing,—which difficulty causes the infant to make violent and injurious efforts on suction. It happens too, that the infant becomes ill-nourished, and this, according to Donné, causes the secretion of an acid saliva, which adds to the mischief.

[In opposition to this theory of mechanical violence as a cause of sore nipples, it may be observed, that Dr. Rossi has noticed that the painful excoriation never appears, even in retracted nipple, where the greatest efforts on the part of the child are required, unless the infant's mouth presents aphthous ulcerations. He states that he has proved this to be the real cause, by applying children so affected to the bosom of healthy women, when fissures of the nipple have been the result.—*Ranking's Abstract*, vol. ii., p. 294.]

MATERIA MEDICA.

ON THE PREPARATIONS OF IRON.

Dr. Clarke *(Dublin Medical Press*, Jan. 27th,) has published a communication, in which he gives a formula for producing a better preparation of carbonate of iron than has hitherto been adopted. The most active preparations of iron have been determined by chemists to be those which contain the metal in the state of protoxide; but it has always been found difficult to preserve the metal in that form from its great affinity for oxygen. Even in the saccharine carbonate of the Edinburgh Pharmacopœia this change takes place, and thus prevents the full advantage which had been anticipated by the proposers of that formula. Dr. Clarke observes that the specimens examined by him rarely contained more than from fifty to sixty per cent. of real carbonate of the protoxide, and he therefore has endeavoured to improve upon the process, by uniting the precipitate as soon as it is formed, with as much sugar as it is capable of combining with. The details are as follows:—

He first makes a solution of five ounces of carbonate of soda in twenty-four ounces of water, and adds to it four ounces of simple syrup; and having previously obtained a pure sulphate of iron, by sulphuric acid and water with iron wire, he then dissolves four ounces of it in two pints of cold water, and instantly adds the solution of soda and sugar. The process being conducted, as in the Edinburgh formula, the whole is thrown on a filter, and the precipitate rapidly mixed with two ounces of sugar, and dried by exposure to air. Dr. Clarke thus gets a preparation containing from ninety to ninety-five per cent. pure carbonate of iron.

TOXICOLOGY.

ON THE TREATMENT OF POISONING BY ACIDS.

In poisoning by acids, the antidotal treatment alone suffices, if applied early. All toxicological writers advise the employment of magnesia, the alcaline carbonates, and soap, but these are not, according to M. Bouchardat, sufficient, and he thinks therefore, that he is entitled to some credit as having laid down a more definite treatment.

It is well to commence, he observes, with calcined magnesia in excess, but as a portion of the acid is absorbed, and tends to destroy life by producing coagulation of the blood, it is not enough to have neutralized the acid in the stomach, but some soluble antacid must be given, which may be absorbed, and so neutralize the acid which has reached the blood. The best substance to effect that purpose is the bicarbonate of soda. The author remarks, that it is of importance not to exhibit the soda in the first instance, as the disengagement of the carbonic acid may cause rupture of the coats of the stomach.

TREATMENT OF ARSENICAL POISONING.

M. Bussy has demonstrated that magnesia forms an insoluble compound with arsenious acid and may therefore be employed as an antidote to that poison. The treatment recommended by Bouchardat is the following:—

After having produced vomiting, give the hydrated peroxide of iron in excess, in combination with magnesia. If there be prostration of the vital powers, the surface is to be stimulated by sinapisms, frictions, warmth, &c. Finally, the expulsion of the poison is to be facilitated by purgatives and diuretics.

TREATMENT OF POISOING BY LEAD.

There are three circumstances to be considered in lead poisoning:—

1. The treatment of poisoning by the salts of lead in large doses.

2. The treatment of slow poisoning by the salts of lead.

3. The prophylactic treatment.

The antidote most relied upon by Bouchardat for the fulfilment of the first indication is the hydrated persulphuret of iron given in excess, mixed with syrup. Vomiting and purging may be solicited by large doses of croton oil. [The second and third indications are not touched upon.]

TREATMENT OF POISONING BY OPIUM AND ITS PREPARATIONS.

1. Empty the stomach by emetics or the stomach-pump.

2. Give a solution of the iodide of potassium.

3. Give strong coffee, without sugar. The proportions recommended by Bouchardat are, an ounce and a half of coffee to half a pint of water, to which is added brandy, half an ounce.—*Annuaire de Therapeutique* 1847.

POISONING BY ARSENIC, DATING BACK TEN YEARS: DETECTION OF ARSENIC IN THE BONES OF THE SKELETON.

A case of poisoning occurred in the village of Scamagne, without the fact having reached the ears of justice. Ten years after, certain circumstances arose which led to the apprehension of four suspected persons. A medical enquiry was instituted, and a skeleton was discovered, which was recognized as belonging to the murdered individual, and who, upon the confession of one of the parties implicated, had died at the end of twenty-four hours, after having taken a large quantity of arsenic. The skeleton and the remains of the funereal appurtenances were submitted to chemical analysis, and arsenic was discovered to exist in repeated instances. The source of the poison was rendered more certain by the fact, that none was discovered in a skeleton which lay so close to the above, that it was at first mistaken for it.—*Cours d' Assize de la Haute-Vienne.—Gazette Méd.*, Janv., 1847.

ANECDOTES OF THE MEDICAL PROFESSION.

[The following anecdotes of the Medical Profession are the "gleanings" of an esteemed member of the Provincial Association. They afford a tribute to the skill, humanity, and disinterestedness which characterize the genuine medical practitioner, and are here recorded as an example and encouragement to others to go and do likewise.]

1.—The anecdote most flattering to the medical profession, which I would recall to your remembrance is, the occasion of the first establishment of the East India Company's power on the coast of Coromandel, which was procured by the favour of the Great Mogul to one of our profession, Gabriel Boughton, of the ship *Hopeful*, in gratitude for his efficient help in a case of great distress to the monarch. It seems that in the year 1636, (!)* (a very early period of our direct intercourse with India, after the Portuguese had discovered the passage thither by the Cape of Good Hope,) one of the princesses of the Great Mogul's family had been burnt dreadfully by accident, and that a messenger was sent to Surat, where foreign traders resorted, to desire the assistance of one of the English surgeons there, for they had acquired a great reputation amongst the natives for their skill in the cure of diseases. Gabriel Boughton proceeded forthwith to Delhi, and was successful in performing a cure on which the Great Mogul's minister asked him what, his master could do for him to manifest his gratitude for so important a service? Gabriel answered with a disinterestedness,—a generosity,—a patriotism beyond any praise, "Let my nation trade with yours." "Be it so." A portion of the coast was marked out for the future resort of English ships, and all duties were compromised for a small sum of money.† A better station, it is true, was selected at the mouth of the Hooghly river some twenty years afterwards, and Calcutta was built; but *here* was the first establishment of our power. Here did the civilization of that vast continent begin; from hence the blessed light of the Gospel may have been first promulgated amongst a hundred millions of native idolaters, since subjected to the control of British power, and made partakers of our enlightened comforts."—*Sir Henry Halford "On some results of successful practice of Physic."*

2.—It has been before remarked how the English were indebted in 1655, to the skill of an English Doctor for permission to settle at Pipley; in 1713 our country was again indebted to its medical skill for further privileges. Mr. Hamilton, a surgeon in the East India Company's service, having accompanied an embassy to Delhi, soliciting certain privileges, a powerful opposition was met in the Mogul's court, and the embassy were on the point of returning unsuccessful, when it so happened that the Emperor Ferokshere was seized with a dangerous illness, which baffled the skill of the native physicians. Mr. Hamilton's advice was solicited, given, and successful. On being desired to name his reward, he nobly cast aside private advantages, and implored a grant of the objects of the mission, which were gratefully conceded. Hamilton's remains rest without a stone to mark the spot in the burial-ground at Calcutta, his patriotism and his services alike unremembered; and although the natives of India have been more linked to England in ties of personal affection, by means of the skill of our surgeons and physicians, than by any other class of the East India Company's servants, they are the worst paid and

* In 1656 (?) owing to the skill of an English doctor, (Boughton,) the East India Company received the Mogul's sanction to establish a factory on the right bank of the river Hooghly.—*Montgomery Martin's History of the British Colonies*, vol. i., p. 4.

† "On the payment of three thousand rupees, a government license for an unlimited trade, without payment of customs, in the richest province of India, was recorded,"—*Mill's British India*, vol. i., p. 7[illegible].

most ill-requited officers in the East; their lives are spent in doing good, and old age brings with it little to solace but the remembrance of the past. It is to be hoped that a profession, combining in its exercise, science, extensive knowledge, and christian charity, will soon meet its deserts.—*Montgomery Martin's History of the British Colonies*, vol. 1, p. 87.

[There appears considerable discrepancy in the dates. Sir H. Halford says that Gabriel Boughton obtained his permission in 1636—*i. e.*, four years after the Great Mogul granted permission to establish a factory at Pipley; and Mr. Martin says, that in 1656, owing to Boughton's skill, permission was given to establish one on the right bank of the Hooghly, and in alluding to this he also says it was in 1655. The discrepancy, however, does not alter the merit of facts so creditable to our profession.]

3.—"I was very anxious to procure, if possible, some medical advice for Mysseri, whose illness prevented my departure. Every one of the European practising doctors, of whom there had been many, had either died or fled; it was said, however, that there was an Englishman in the medical service of the Pasha, who quietly remained at his post, but that he never engaged in private practice. I determined to try if I could obtain assistance in this quarter. I did not venture at first, and at such a time as this, to ask him to visit a servant who was prostrate on the bed of sickness, but thinking I might thus gain an opportunity of persuading him to attend Mysseri, I wrote a note mentioning my own affair of the sore throat, and asking for the benefit of his medical advice. He instantly followed back my messenger, and was at once shown up into my room. I entreated him to stand off, telling him fairly how deeply I was "compromised," and especially by my contact with a person actually ill, and since dead of plague. The generous fellow with a good humoured laugh at the terrors of the contagionists, marched straight up to me and forcibly seized my hand, and shook it with manly violence. I felt grateful indeed, and swelled with fresh pride of race, because that my countryman could carry himself so nobly. He soon cured Mysseri as well as me, and all this he did from no other motives than the pleasure of doing a kindness, and the delight of braving a danger."—*Cairo and the Plague. Eōthen*, p. 314.

(To be continued.)

Medical Intelligence.

HEALTH OF TOWNS.

Lord Morpeth obtained leave on Tuesday, March 30th, pursuant to notice, to bring into the House of Commons a Bill for improving the Health of Towns.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, March 11th:—John Shepherd Fletcher, Manchester; Thomas Oldacres, Market Bosworth; Thomas Binford Eyre, Yeovil; Nathaniel Best Gill, E. I. Comp. Service; George Booker, Dronfield, Derbyshire; Edward Mawthill Tearne, Stockton, Worcestershire; Horatio Lillifant, Exeter; Charles Henry Holman, Crediton; Edward Hancock, Stoke, near Plymouth.

Gentlemen admitted Licentiates, Thursday, March 18th:—Robert Finch, Greenwich; Robert Kemp Buckell, Southampton; George Anstice Knott, Bristol; John Edmund Currey, Essex.

OBITUARY.

Died, February 27th, at Tripoli, John Dickson, Esq., M.D., Surgeon, on the half-pay of the British Navy. Dr. Dickson had been resident at Tripoli upwards of thirty years, and such had been the extent of his gratuitous attendance on the indigent, that his decease was looked upon as a great public calamity. His funeral was escorted by a military guard of honour, sent by the Pacha, and attended by the Foreign Consuls, by all the European residents of every class, and by several thousands of Jews and Mahomedans.

March 16th, at Southampton, aged 28, Julius Veronge, Esq., M.D., Surgeon of one of the Royal West India Mail Packets.

March 20th, aged 71, Charles Rochement Aikin, Esq., of Bloomsbury Square, a Member of the Royal College of Surgeons, and well known for his scientific and practical knowledge of chemistry.

March 26th, in Bedford Square, T. Wilkinson King, Esq., Surgeon, Lecturer on Pathological Anatomy, &c., at Guy's Hospital.

BOOKS RECEIVED.

The Microscopic Anatomy of the Human Body in Health and Disease. By Arthur Hill Hassall, F.L.S. &c. Part VIII. London: Highley. 1847.

Lecture, introductory to a Course of Clinical Medicine, delivered in the Theatre of Queen's College, Birmingham. By Samuel Wright, M.D., Edin., F.R.S.S.A., Physician to the Queen's Hospital, and Professor of Clinical Medicine in Queen's College, Birmingham, &c. &c. London: Churchill. 1847. 8vo., pp. 23.

An Essay on the Nature and Properties of the Tenbury Mineral Waters. By A. W. Davis, M.D., London: Whitaker. 1847. pp. 40.

CONICAL CORNEA.

Mr. W. White Cooper would feel greatly obliged to any gentleman who would, from observation, favour him with the particulars of cases of *conical cornea*, together with an abstract of the treatment employed, and the result.

2, Tenterden Street, Hanover Street.

TO CORRESPONDENTS.

Communications have been received from Mr. F. Buckill; the Sheffield Medical Society; Dr. J. Campbell; the Birmingham Pathological Society; Mr. Bartrum; Mr. J. E. Wood.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON CLINICAL MEDICINE.

By W. R. Basham, M.D., Physician to the Westminster Hospital.

Lecture IX.

Clinical remarks on idiopathic Phlebitis: Record of the case; treatment and convalescence; probable cause of the disease; reasons for thinking it connected with the rheumatic diathesis.—Pathological conditions of the vein in phlebitis: exudation of plastic lymph; tendency of venous inflammation to centripetal progress.—Changes occurring in the plastic deposit:—I. Solution and removal.—II. Semi-organization and persistent thickening.—III. Purulent transformation and its serious consequences.—Observations on the treatment.—Cold and rheumatism considered as predisposing causes of phlebitis.

Gentlemen,—Cases of idiopathic phlebitis—inflammation of the veins occurring spontaneously—are of sufficiently rare occurrence to be of some interest to you in a course of clinical instruction. On this occasion I propose to point out to you the pathological conditions of this disease, the most frequent predisposing causes, the general principles of treatment, together with the ulterior consequences or effects of this affection, when existing independently of local injury. The case of inflammation of the saphena veins of both legs in a man in Burdett ward will afford me this opportunity. The case during its progress, may have appeared trifling to you, the symptoms being for the most part unaccompanied by pain, or much constitutional disturbance, yet, is this condition of the veins, fraught with much possible danger, the chances of purulent termination being by no means remote, and which once established excites conditions of fearful jeopardy, and rarely exempted fatality.

The ward-book reports the case of J. H., a labouring man, aged 27, admitted suffering from idiopathic phlebitis. The appearance of the patient on admission was that of a man throughly out of health, of somewhat anxious aspect, but not suffering any amount of pain. He states that he has felt a tense cord-like swelling in both his legs for the last seven days. There is no want of mobility in the lower extremities. He walks and moves about without pain; but commencing at the internal malleola of both legs, and extending up on the inner edge of the tibia, and between the edge of the belly of the gastrocnemius, a cord-like swelling is felt, which is slightly painful to the touch, and the course of which is marked by a dusky red line. It is evidently the saphena major vein in a state of inflammation. The cord-like hardness extends the whole length of the vein, and is lost only as the vessel disappears under the fascia to join the crural. The same condition exists in the saphena veins of both legs. There is no swelling of the glands of the groin; no wound or any abrasion of surface on the foot, or any part of the lower extremities. Has not felt any rigors. The pulse is 84, soft; the tongue is white and moist; there is no deficiency of appetite; no thirst; no febrile heat of skin; but the urine is dark coloured, and deposits a copious precipitate of the pink urates. He has been at work in the coffer-dam at the Houses of Parliament, working often for hours up to his ankles and knees in water.

He was admitted on the 20th January, and ordered Hydrarg. cum Creta et Pulv. Ipecac. Co., utrq., gr. v., quartis horis. Beef tea diet, and the lower limbs to be enveloped in hot moist flannels, to be repeatedly renewed. On the next day the cord-like tension of the veins had materially diminished, and much less pain was felt on pressure. The dusky-red colour now marks the course of the veins, from the inner ankle to the groin, indicating that some smaller branches, emptying into the main trunk, are here and there likewise affected. On the 23rd slight ptyalism was noticed, and in the course of the afternoon a brisk diarrhœa commenced, which was directed not to be checked unless it became urgent. The remedies were to be repeated. On the 24th the report states, that after many watery dejections the looseness spontaneously ceased, and this day no pain was experienced in any part of the indurated vein, and the dusky-red colour was now confined to the inferior part of the vein. On the 25th the cord-like tension was gradually disappearing, his general appearance had much improved, the appetite, which had not been deficient from the first, had now become craving, and he was placed on an improved diet. On February 1st he was reported convalescent, and discharged on the 2nd.

It may be mentioned as remarkable, that a man, suffering from chronic rheumatism, and in Dr. Kingston's ward, is suffering from a similar condition of the saphena in both limbs. I have no hesitation in referring the origin of this state of the veins to the effect of cold. We did not see this patient during the first period of the attack; we cannot, therefore, determine the amount or nature of the constitutional disturbance

existing at the commencement; at any rate, we are assured of certain circumstances capable of predisposing the system to such disturbance. The exposure of the lower extremities for hours at this season of the year, to the influence of cold and wet, is not an unlikely disturbing cause. Had symptoms of rheumatism coexisted with the inflammation of the saphena veins, as is the case in the patient in Bouverie ward, there could have been no difficulty in associating this state of the veins with the phlebitis accompanying the rheumatic diathesis, and which has been noticed by more than one author. Yet, notwithstanding the absence of all erratic pains, I am still inclined to refer this condition of the veins to a rheumatic origin, the state of the urine presenting all the features of rheumatism, and the exciting causes being in every respect capable of developing most of the conditions and elements of that disease.

Phlebitis from rheumatic causes may be considered as the lightest form of this most serious malady; it differs only from the phlebitis produced by wounds, or by the absorption of animal septic poisons, in that there is less tendency to terminate in purulent formation, a condition that renders these two latter affections of such momentous importance. The plastic contents of the vein in this rheumatic form of phlebitis, either dissolve or liquefy; and being thus removed, are carried away into the general circulating mass, or at most remain as a plug in the vein, becoming semi-organized, and either completely or partially obstructing the circulation through the affected vessel, the numerous venous anastomoses subsequently carrying on the current through their enlarged and dilated canals.

When a disease presents distinct external manifestations, it is convenient to consider it—first, in reference to the local symptoms; and, secondly, as to the extent of constitutional disturbance, accompanying or produced by the local disease. I wish therefore to detail to you—first, the pathological conditions of the inflamed vessels, the cord-like tension of which first arrests our attention; and, secondly, the constitutional conditions, if any, produced by the state of the veins.

It would appear from the pathological researches of the most recent observers, that the inner membrane of the veins in the earliest stage of the inflammatory process becomes discoloured, of a purplish hue, occasionally of a light scarlet, and that this discolouration is not uniformly spread over the inflamed portion, but irregularly—in patches, sometimes presenting a striated appearance. Accompanying this alteration in colour, and as the result of the hyperæmia of the lining membrane of the vein, is the exudation or deposit of plastic lymph, which, forms in layers, each succeeding layer being deposited external to the last, the whole being concentrically arranged, till the tube of the vein becomes completely clogged, and impervious to the current of the circulation. It does not, however, necessarily follow that the vein becomes totally impervious; for the fibrinous deposits do not always continue till the canal of the vessel has become obliterated. The inflammatory process being arrested, the layers of lymph have, perhaps, only lined the canal, and considerably diminished its capacity—not totally closed it. It is now, irrespective of complete, or only partial, obliteration, that the vessel has acquired that cord or quill-like character to the sense of touch, which you felt in this case. The plastic lymph lining the vein is for the most part colourless; it has been derived from the blood, and consequent upon its isolation and deposition there occurs a serous infiltration into the outer tunic of the vein, and not unfrequently extending into the cellular tissue investing the vein. This serous fluid holds in solution the hæmaphæin, or colouring matter of the blood; and it is its presence in the serous infiltrated fluid which causes the dusky-brown red hue that externally marks the course, extent, and ramifications of the inflamed veins.

It may happen that the inflammatory action does not continue with sufficient intensity completely to plug up the canal of the vein; and I think the case before us presents us with an example. When this happens, the circulation is still imperfectly carried forward through the centre of the plastic layers; for as these layers are invariably thrown out from the lining membrane of the vein, and are added to the circumference of the plug, it follows, that for a time, at least, the circulation goes on, the calibre of the vein diminishing as each succeeding layer is added to the circumference of the deposit. As a consequence of the complete obliteration of the vein, the circulation is then maintained by the anastomosing veins.

One of the most important characteristics of venous inflammation is its tendency to centripetal progress: it less frequently extends from trunks to branches than from branches to trunks; and thence progresses towards the heart, the centre of the circulation. This is one of the conditions that causes phlebitis to be of such vital moment.

The subsequent changes that take place in the plastic mass, plugging the channel of the vein, are strictly analogous to those observed in inflammatory products in other parts of the body. One of three conditions must happen:—

1. The fibrinous mass disappears slowly, and gradually becoming dissolved, it is carried away by the restored current of the circulation.

2. The lymph becomes semi-organized, and forms a permanent addition to the inner parietes of the vein: this more frequently happens when the plastic layers have not completely obliterated the channel, but merely lessened its calibre. When this occurs, tense, quill-like hardness persists, and a subsequent examination of the vein would present its walls much thickened, its capacity diminished, and when cut across, the vein would remain uncollapsed, and as an open cylinder.

3. The third and most serious change to which the inflammatory exudation is exposed, is the special tendency that it has to pass into suppuration. It is this tendency which makes phlebitis at all times so hazardous in its consequences; the blood becomes contaminated by the purulent degeneration of the plastic layers, abscesses in different organs of the body, the liver, lungs, and other glands, are the formidable effects, and death the inevitable termination.

It must be borne in mind that the inflammatory process in some forms of phlebitis does not pass beyond the deposit of the plastic lymph, and that no farther *morbid* change taking place, the blood escapes that fearful purulent contamination, which, if once established, rarely terminates otherwise than fatally.

The case we have just seen presents us with an example of an exemption from these terrible secondary consequences; you must, nevertheless, not forget that however trivial and light the symptoms may have appeared to you, a case of inflammation of the veins from whatever cause, must be considered serious, as the tendency to purulent degeneration of the plastic mass is greater than either to its solution, removal, or semi-organization. When purulent transformation of the deposited lymph does not take place, it is often remarkable with what rapidity the plug disappears, and the function of the vein as a permeable tube is restored. In the case under consideration, in the course of a few days, the vein had become soft, and evidently permeable. Hasse states that this change is effected probably by the liquefaction and solution of the plastic mass in the circulating fluid, and a channel by this means is again opened to the sanguineous current, and there are many reasons for supposing that the exuded lymph is not removed by absorption by the vasa vasorum, but is absolutely dissolved in the blood, and carried away into the general circulation. The removal of the fibrinous deposit in this case, and the subsidence of all farther symptoms of inflammation, were consentaneous with the faint indications of ptyalism produced by the small and alterative doses of mercury. From this moment the cord-like hardness disappeared, the veins in the greater portion of their course had become soft and elastic, while the dusky line which marked the course of the inflamed vessel had entirely disappeared.

Phlebitis in all its forms presents us at the outset with all the characteristics of a sthenic inflammation, and the treatment must be based on those principles which experience teaches us are most successful in arresting the results of inflammatory action. A general antiphlogistic regimen must be strictly enforced. Mercurials, with opium, or Dover's powder, are the best alteratives. The lower extremities of this patient were for nearly four days enveloped in hot moist flannels, constantly renewed. The best results have followed this treatment; the patient is convalescent, and the hardened plastic deposit in the saphena veins has nearly disappeared. The amount of constitutional disturbance was but slight; beyond the appearance that the countenance indicated of deranged health, there was no symptom of any moment declaring that the general functions of the chylo-poietic viscera were much deranged; the appetite was not deficient; the bowels not irregular; but the urine was loaded with urates, uric acid crystals were also apparent, and there was a considerable amount of purpurine in combination.

From the absence of much constitutional disturbance, it would appear from this example, that it is not till the terrible condition of purulent degeneration of the plastic lymph has commenced, that any remarkable or characteristic constitutional symptoms are developed. You must bear in mind, however, that the absence of these general symptoms is not to be taken as an index, that little is required to be done, or that the case is trivial, and needs but slight attention. So long as the vein is the seat of inflammatory action, so long as a fibrinous deposit clogs up the canal, suppuration of the plastic mass may be dreaded, not remotely, not contingently, not merely accidentally, but as a change strictly in obedience to the organic laws governing these pathological products. It must be our object, therefore, in the treatment of such cases, to avert if possible this much dreaded mode of termination. This can only be effected by the judicious and persevering application of those remedies that have been already indicated. The period of convalescence must be treated with caution; there is a special tendency to relapse in these cases; the local inflammation then re-appears with an intensity that no remedies can check, and which now passes rapidly and uncontrollably into purulent transformation and inevitable death.

The rheumatic diathesis does not often express itself by phlebitis; yet it is not difficult to understand, that in certain morbid conditions in which the fibrinous elements of the blood are in excess, and a general inflammatory predisposition exists, cold locally and continuously applied to the lower extremities, in a manner favourable to local derangement, may predispose to inflammation of the veins of those parts. There must, however, be a special idiosyncrasy to determine the inflammatory action to the venous tissues, rather than to the fibrous tissues, muscles, ligaments, tendons, or synovial membranes, as is most frequently observed in rheumatic inflammation. In fine, this case teaches us, that under special circumstances, exposure to cold and damp, acting on the rheumatic diathesis, is to be considered among the predisposing causes of idiopathic phlebitis; and that though rarely developing this disease, yet under favourable circumstances, and in peculiar idiosyncracies, these causes are competent to call it forth in its mildest, as well as in its most formidable, aspects.

THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(*Fourth Series of Experimental Researches.*)

By William Addison, M.D., F.R.S., Malvern.

XI. Structural Changes produced by Scrofulous Disease.

(*Continued from page* 171.)

A man, aged 37 years, died of hæmoptysis and phthisis. The body was examined forty-eight hours afterwards.

On opening the chest, the right lung was immediately seen to be totally different from anything resembling a healthy lung; it was converted into an ash-grey coloured firm texture, which did not in the least degree collapse upon the opening of the chest, but remained bulging upward, filling the whole of the right cavity of the chest, and adhering firmly at all

points to the costal wall. On attempting to separate the adhesions, the texture composing the lung was found extremely brittle, crumbling down under the fingers like dry gingerbread, and every now and then a cavity containing pus,—sometimes white and sometimes red,—was opened by the separation. The *pleura* in the first place was found altered in vascularity and appearance; it was very much thickened by innumerable layers of a fibrous texture, infiltrated with transparent gelatinous (mucous) matter. The fibres were seen by a lens to be curled or waved, and elastic; in the direction of their length several red vessels traversed between and among them, and their minute branches extended into, and subdivided in, the gelatinous material. The arrangement and size of the vessels in one layer of this fibro-gelatinous texture, bore no resemblance to those of another layer, and in all it differed essentially from the mode of distribution of the vessels of the healthy pleura. In one of these fibro-gelatinous layers I counted with the lens fifteen vessels, pretty nearly equal in size, running side by side a straight or parallel course of an inch or more, without giving off any branches, or receding from, or approaching nearer to, each other; their internal diameters varied from $\frac{1}{50}$th to $\frac{1}{80}$th of an inch, and they were distant from each other, about the $\frac{1}{40}$th. The intervals between the vessels, including the walls of two contiguous vessels, consisted of glistening waved fibres, imbedded in gelatinous matter. Under the microscope this gelatinous or mucus-like matter, the relations of which have been traced in former researches, had the appearance of a fibrous texture, thickly studded with colourless cells; and the red vessels traversing it had no other coats or walls than what were formed by the material itself.

On making sections into the right lung, the normal texture of the organ could no where be found, the whole of it having been transformed into the brittle ash-grey substance before-mentioned. This new and morbid texture was internally partly red, and partly white or grey, both portions containing numerous cavities; those situated in the red parts differing, however, in many particulars, from those situated in the white or grey. The free surface of the walls of the former,—the red, for instance,—was smooth and uniform, covered with a soft, pultaceous, white material, beneath which were large straggling red vessels, visible to the naked eye, ramifying in all directions. The free surface of the walls of the cavities in the white substance was very rough, resembling a miniature rock-work, irregular eminences and projections, and sometimes bands, thrusting out on all sides, partially dividing the cavity into numerous compartments. These irregular walls were here and there reddened in patches by blood-vessels, but altogether the vascularity was much less than upon the smooth walls of the cavities in the red texture. The substance of the lung, wheresoever small portions were examined with the microscope,—whether in the whiter, or as Dr. Williams describes it, *parsnip-coloured*, portion, or in the red,—was found, composed of colourless cells, granular matter, and molecules. The white pultaceous matter lining the surface of the cavities in the red portions of the structure, was a corpuscular or incoherent cellular texture, (nearly solid pus,) and the coats of all the minute blood-vessels which were examined with high magnifying power, were found chiefly or entirely composed of similar objects or cells.

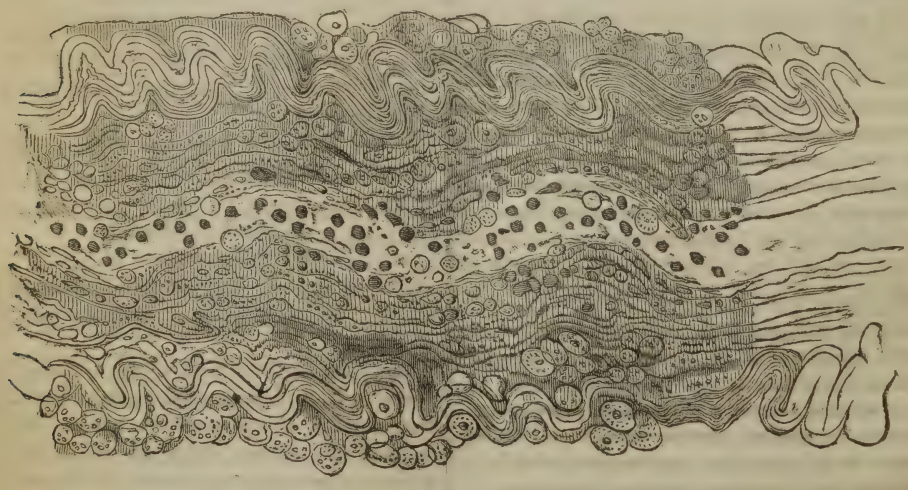


Fig. VI.—A blood vessel, from abnormal fibro-gelatinous texture, on the surface of scrofulous lung.—Case 2,

A girl, aged fifteen years, was seen but once, lying in bed upon the left side, with the knees drawn nearly up to the chin; the eyes were suffused with tears, and the conjunctiva red; the pulse was feeble and quick, the tongue red and dry, and she complained of headache; there was a slight squint in the left eye, and upon trial the left hand and arm were found weaker than the right. These last two symptoms it was supposed were new or recent, for upon inquiry they had not been noticed before. Upon farther investigation it was found that the illness commenced two months before with *influenza*, cough, and pain in the side; these symptoms subsided in about three weeks, but as she remained ill, it was supposed, by those previously attending her, that she laboured under an attack of *bilious* or *typhus fever*. Two hours after the visit I have just described, the patient was seized with convulsions, and died the following day comatose. The body was examined twelve hours after death.

The pia mater was extremely red, all the vessels being turgid with blood. On examining the vessels through a lens, a number of red nodules or points were seen situated upon many of the smaller branches, beyond which the branch was empty of red blood. [In the subsequent microscopical examination it was forgotten to observe what these red points and the apparent obstruction of the calibre of the vessels was owing to.] Numerous semi-transparent granulations were scattered over the texture. The ventricles of the brain contained a considerable quantity of clear limpid fluid, and the fornix and other contiguous parts of the structure were softened. The plexus choroides was very pale and voluminous, and four or five hydatid-like or vesicular-looking bodies, as large as small peas, were adherent to the structure, the pale colour of which strongly contrasted with the highly injected vessels of the *velum* or fold of pia mater with which it is continuous.

The semi-transparent granulations of the pia mater were found, on examination with the microscope, to be composed of a corpuscular or cellular texture, and gelatinous matter, and the coats of a small vessel from an opaque portion of the pia mater, appeared to have the same composition. The pallor of the plexus choroides was found owing to an unusual abundance of the large colourless corpuscles or cells, natural to the texture, and the hydatid-like bodies were groups of similar cells. The softened portions of the brain were composed of multitudes of incoherent cells, resembling pus-cells, which had replaced the nerve-tubes, and destroyed the normal firmness and consistency of the structure.

On opening the chest numerous large red vessels were seen branching over the pericardium, and the interior of the pericardium was found rough throughout to the touch from multitudes of small granulations. The right lung contained many tubercles, and the left lung adhered to the walls of the chest. The adhesions were very brittle, and when broken down, which they easily were, the surface of the pleura, both on the lung and on the chest, was found rough from granulations similar to those within the pericardium.

Upon examination with the microscope, incoherent colourless cells, and but slightly coherent corpuscular or cellular textures, were found to be the chief and characteristic elements of the granulations, of the soft matter of the adhesions, and of the walls of the minute branches of the new vessels.*

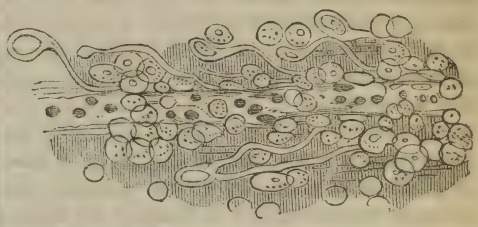
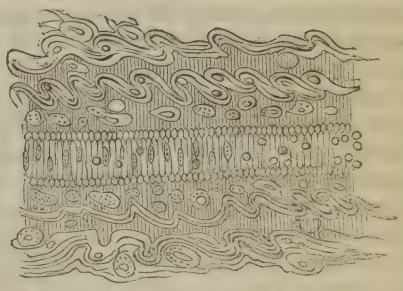


Fig. VII.—A capillary vessel from the pia mater of a child, who died of hydrocephalus. Case not related.



Fig, VIII—Large vessel of pia mater, (normal.)

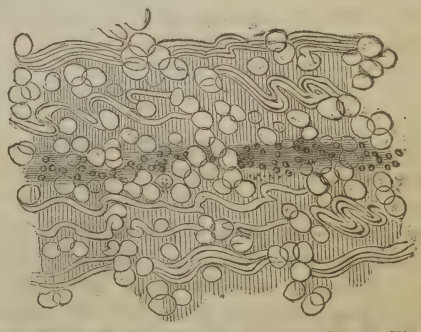


Fig. IX.—A blood-vessel of the same size as *Fig.* 8, from an opaque spot of pia mater. Case 3.

Other cases, of which I have notes and illustrations, might have been added to these, but as they all bear upon the same point,—the replacement of the normal elements of the structure by incoherent cellular forms,

* In making these microscopic examinations, I remove small portions of the textures with as much blood as can be preserved in the vessels, immersing them in a weak solution of salt and water. In this way they may be kept full of blood for some hours, and when the small vessels are examined, the red cells may be seen flowing along them, rendering the parts more distinct.

and gelatinous or tuberculous matter, and are all, therefore, similar to one another—I have deemed the three cases related sufficient to establish the facts upon which my conclusions are grounded; and it appears to me that no one is entitled to disclaim against the conclusions, on the presumption that my microscope is a bad one, or that my eyes see more than other peoples, and at the same time decline to inform me of the truth. It seems hopeless to attempt to make any progress in the knowledge of disease, if, contrary to the rules by which experimental researches are estimated in other sciences, it be allowable in physiology and pathology for any nameless *we* to dogmatize, without offering any evidence to shew that work has been done, and different facts arrived at upon the same subject. However copious and extensive a man's scientific knowledge may be, and however much or long he may have used the microscope on other topics of investigation, he derives from these sources no ground of authority to pronounce judgment, either for or against my facts, inferences, or conclusions.

Now, the first conclusion which it appears to me may at once be drawn from these pathological researches is,—that the deposit of tubercles, or of tuberculous matter, either in the parenchyma of the lung, or in the texture of any other organ, does not explain the pathology of consumption, or of scrofulous disease in general. This corresponds with the fact, now well known, that tubercles may exist to a considerable extent in the lungs, and yet no consumption follows. Tubercles and phthisis have not the relation of antecedent and consequent. These investigations, on the other hand, disclose a vast scene of activity,—new textures, new blood-vessels, new elements, and a busy scene of excretion, amidst which the normal texture disappears, and the natural functions of the organ therefore necessarily cease.

The researches of Shroeder Van der Kolk, and more especially those of M. Natalis Guillot, have shown that a great transformation in the vascular system of the lungs is one of the remarkable phenomena attending the evolution of phthisis. The injections, dissections, and microscopical examinations of the latter especially, have shewn that as the capillaries of the walls of the air-cells, and the branches of the pulmonary artery supplying them, are obliterated, they are replaced by an adventitious vascular system, supplied not with dark and venous blood, but with arterial, derived from the bronchial arteries, and from the vessels of the mucous texture of the air-tubes. In proportion as the tubercles enlarge and soften, this new vascular system spreads more and more, replacing the branches of the pulmonary artery, until their existence ceases to be matter of demonstration. These new-formed vessels, which at a certain period of the disease become incalculably numerous, stop short around the tubercles, without penetrating into their substance. But the case is different in respect of the cavities; they extend into the prominences on the surface of these, and ramify abundantly in, and impress colour upon, the bands so frequently stretched from one point to another of their parietes. If a portion of the wall of a cavity be placed under water, after all mucous and purulent matter has been washed from its surface, this surface is seen studded over with tufts of new vessels, which, taken together, represent a sort of villous structure, as observed with a common lens. "Hence," observes the author, M. Guillot, "it is not only the highly vascular network surroundiag the cavities with its new circulation, that constitutes a striking feature in the anatomy of these excavations, but farther, the terminal tufts or villi which bring arterial blood derived from the aortic circulation into contact with the air, having replaced the normal capillaries which before brought venous blood in contact with the air."*

My microscopical investigations not only corroborate these prior researches, which appear to me to have been strangely neglected, but I think they go farther, and prove that this great vascular transformation is only one of the accompaniments of a great metamorphosis of the pulmonary textures, in which a coherent, elastic and homogeneous cellular texture, with non-secreting capillaries, is supplanted by a brittle, soft, corpuscular texture, with new vessels copiously excreting or discharging corpuscular or cellular forms.

But it has been proved from a minute examination of the condition of the embryo textures, and of the nature and composition of blood, that the law or order of the metamorphosis in the normal growth of the structure is from incoherent corpuscles containing a secreted material, to soft and brittle corpuscular secreting textures, and from these to the coherent, non-secreting, cellular and fibrous; and therefore, *if a coherent, cellular, and fibrous non-secreting texture becomes changed into a brittle corpuscular secreting one, the metamorphosis is retro-grade.*† Whether the incoherent corpuscles or cells, which are the distinctive elements of the new textures and of the coats or walls of the new vessels, and which so abundantly appear in the matter excreted or discharged from them, be the identical colourless cells which previously circulated in the blood, or whether they spring by a species of secondary growth from germs in the morbid texture, is a question that need not now be entered on. It is sufficient for the conclusion just stated that incoherent colourless corpuscles, whether springing from the texture or the blood, with very thin and tender

* See *Observationes Anatomico Pathologici, &c.*, of Shroeder van der Kolk, L'Experience, tom. i., p. 545; and Researches on Phthisis, by Louis, Syd. Soc. Ed.

† The terms secreting and non-secreting are used here in compliance with the common usage, but in all cases it is corpuscles or cells that *secrete* the blood-vessels, and textures *excrete*; the former prepare or elaborate, the latter throw off or discharge.

walls, filled with an elaborated or secreted matter and molecules, and analogous to those seen in the embryo textures, have taken the place of the transparent, coherent, strong and elastic, cellular and fibrous textures. All that need be affirmed is, that corpuscles or cells, apparently identical with those which form the elements of, and are excreted by, the morbid texture, circulate abundantly in the blood, and may be seen adhering to, and altering the character of, nutrient vessels; and these *facts*, established by observation and experiment, are sufficient to explain the origin of the elements which effect the structural changes.

But before this conclusion can be admitted as the basis of the pathology of scrofulous diseases, it is necessary that its foundation on natural laws be substantiated by further investigation.

(*To be continued.*)

OBSERVATIONS ON HERNIA, AND ITS TREATMENT BY OPIUM.

By Butler Lane, M.D., M.R.C.S.E., &c. &c.

Among the most serious emergencies of surgical practice may be reckoned cases of strangulated hernia. This is especially the case in country practice, where there may be lack of counsel to impart confidence in action, and where life may depend on the judgment and energy of a single professional individual. Even in the metropolis, where abundant experience and operative skill are available, it must be acknowleged, that such cases often occasion considerable embarrassment. It has always been an object of surgical science to supersede the necessity of operation, in cases of strangulated hernia; other objectionable circumstances besides the danger, place the operation in question among the foremost of the *opprobria medicinæ*. I am therefore induced to direct the attention of the profession to a method of treatment, which has been attended with such marked success in two consecutive instances, as to convince me that it deserves a fair and extensive trial in the arena of hospital practice.

The plan I am about to advocate, consists in narcotising the patient by the free and continuous administration of opium. Where or with whom this method of treatment originated, I know not, but I shall be happy to surrender the merit of suggestion to any just claimant. When I adopted the practice in the first instance, I had a vague idea of having seen the use of opium in hernia mentioned in some periodical, and my memory did not serve me farther; but from considerations, hereafter to be mentioned, it seemed to me feasible in affording some prospect of relief.

The first case to which I shall refer, was one of oblique inguinal hernia, occurring in a female, about 45 years of age. The previous history was somewhat obscure, but it seemed probable that slight protrusion and incarceration, (probably omental in its nature,) had existed for some time previous to the present period. She was under the care of Messrs. Shelley and Stilwell, of Epsom, to whom I am indebted for most of the following particulars; and when I saw her with those gentlemen, unequivocal symptoms of strangulation of the hernial tumour had existed at least three days. The swelling had enlarged considerably, there was much abdominal pain and tenderness, obstinate constipation, constant nausea, and copious vomiting of decidedly stercoraceous character. The symptoms had suddenly supervened, and gradually increased in intensity. In the first instance, the stomach had retained large doses of cathartic medicine, castor oil, and calomel, though without any aperient effect, but now everything was rejected as soon as swallowed. All the usual medical means available had been unsuccessfully resorted to, and the taxis had been carefully and repeatedly applied. The tumour had now become exceedingly tender, the countenance assumed an anxious expression, and the pulse was accelerated. There could be no doubt that the operation was desirable, and that without delay, but to persuade the woman to submit to it was impracticable. I again employed the taxis unavailingly. A cathartic enema was then ordered, and any farther procedure was remitted till the following morning, when we hoped by other means to induce the woman to undergo the necessary operation.

When I again met Mr. Shelley and Mr. Stilwell, we found all the symptoms had increased in urgency, and the vital prostration was become more obvious. Our patient, however, was no less refractory and obstinate than heretofore. Her danger was imminent, and in fact, death seemed almost inevitable. The state of depression rendered a tobacco enema objectionable; it was, however, agreed to try it, but though its sedative influence was fearfully powerful, yet it did not seem to afford any advantage, no fæcal evacuation being obtained, and the stercoraceous vomiting and other symptoms continuing as before. As a last resource, I then suggested the administration of opium, in doses of one grain every hour, which was agreed to, though with but little anticipation of effectual relief.

I saw the woman next day with Mr. Stilwell, and was agreeably surprised at the change which had taken place. Twelve doses of opium had been administered and she was fairly under its influence, having the appearance of a helpless state of intoxication. She had slept much, and when roused, her answers and conversation were very incoherent. The pulse had increased in power, and diminished in frequency. No complaint was made of abdominal pain, and there was much less tenderness in the umbilical region and the site of the tumour. The sickness had ceased and food had been taken and retained. The improvement was permanent and progressive. A simple enema was

administered that evening, and brought away much fæcal matter. In the course of the day the tumour became spontaneously much reduced in size; for some time subsequently a small swelling remained in the groin, and whether it ever disappeared completely I am unaware.

The second case occurred in the practice of my friend and partner, Mr. Allan, of Epsom, and I am chiefly indebted to him for the particulars. A woman, aged 70, suffering severely with a catarrhal attack, presented symptoms of obstruction of the bowels, and on examination a femoral hernia was discovered in the left groin. She said she had first perceived the swelling two or three months previously, and it had seemed within the last few days to increase materially from the violence of the cough. The taxis and other remedial means were unavailingly resorted to, and the symptoms had existed 48 hours when Mr. Allan requested me to see the patient with him, that we might determine as to the operation. At that period I found the tumour the size of a large walnut, free from heat or pain, neither was there any abdominal tenderness. The tongue was somewhat furred and dry, but there was no great heat of skin; the pulse did not exceed 84, was regular and not deficient in tone. The woman's chief complaint was of intense nausea and violent sickness, coming on with the paroxysms of coughing; any movement or attempt to change her position would also occasion it, and on taking any nourishment, it was immediately rejected; with the continued vomiting stercoraceous matter followed in abundance. I applied the taxis some time, and with considerable force, but unsuccessfully. There could be no doubt as to the nature of the case, and the ultimate necessity for an operation seemed inevitable, but as the constitutional symptoms were not urgent, and the operation was strenuously objected to by the husband, we agreed to some farther delay. A large enema with castor oil was administered, and, beyond a little gruel, no nourishment was to be attempted.

No favourable change had resulted the following morning,—night had afforded no repose, and the retching and vomiting had been almost incessant. The enema had for the most part been retained some hours, but its evacuation had been unaccompanied by fæcal matter. The constitutional depression was more manifest, the pulse had become accelerated, and some pain and tenderness were experienced both in the abdomen and in the tumour. Mr. Allan proposed that the tobacco enema should be used, and in the event of its failure, that the operation should be had recourse to without farther delay. Bearing in mind the success which had attended opiate treatment on the former occasion, I suggested its adoption in the present instance, as there was still great aversion to the operation on the part of the patient and her husband. Mr. Allan acceding to my proposal, one grain of opium in the form of pill was administered every hour.

When we met the following morning eight doses had been taken, and the narcotic influence was manifest, though the medicine was evidently well borne. The pain and vomiting had ceased, but the bulk of the tumour was not diminished, nor had the bowels been moved.

After the administration of four more doses the tumour was found to have diminished to one half its former size, the patient still continuing free from pain and sickness. A large injection of gruel with castor oil was then thrown up the rectum, and ample evacuation of fæces soon took place. The relief was permanent. A small swelling remained in the groin, and still continues, probably containing a portion of incarcerated omentum. In the words of Mr. Allan, "*Thus was this patient saved the risk and pain of a serious operation, by a remedy, every dose of which brought relief and comfort.*"

I shall now venture on a few brief observations in reference to the *modus operandi* of opium in hernia, and my opinions on this subject have emanated rather from a long continued investigation of the action of the various narcotics and sedatives, than from a mere wish to clothe the above isolated facts with an appropriate and well-seeming theory.

The pathological elements of strangulated hernia are two-fold:—on the one hand those connected with the protruded bowel, and on the other those depending on the muscular and tendinous tissues which surround the opening through which the intestine protrudes. That the tendinous structure can only exert a passive influence is generally allowed, and that *permanent* spasm can under ordinary circumstances affect the fibres of the voluntary muscles, or even those which are instinctive or spinal-motor, would not on reflection seem probable; and yet on this latter assumption have all the theories of hernial strangulation been chiefly founded as far as I am cognizant thereof. Now, in a pathological point of view, beyond the visceral extrusion, through a narrow and unyielding opening, I believe the active cause of hernial strangulation to be essentially connected with the intestine itself. Suppose a portion of intestine forced into a cavity of which the neck is somewhat constricted. Now, we know that the general effect of superficial pressure on any portion of the body will occasion a greater obstacle to the venous part of the circulation than to the arterial. The balance of action of the two circulating media being disturbed, the afflux will incline to exceed the eflux, until such time as circulation is completely arrested, when gangrene must take place. In accordance with what I have stated above, any medical attempt to relax the external muscular structures would be unavailing; but on the other hand, if we can relax and

reduce the bulk of the intestinal substance, we might then hope for advantage. Now, let us look at the influence of the various sedatives, and see how far any one of them may be expected to conduce to the desired end. Warm baths and bleeding may lower the general system, and relax the muscular structures, but the result of their employment do not sufficiently indicate a decided bearing on the local morbid state. Antimony exerts a special depressing cerebral influence; it diminishes the power of the heart, and lowers respiratory action; it also affects the contractility of the voluntary muscles, but it does not diminish the peristaltic contraction of the intestines in the first instance, neither does it *immediately* influence the capillaries; moreover, it is objectionable on account of exciting irritation in the mucous membrane of the alimentary canal. Belladonna exerts its chief influence on the voluntary muscles; so likewise does tobacco, which in its cerebral influence will subsequently determine to the heart; over that centre of the circulation, digitalis appears to exert a direct control, but it has no peculiar action on the capillaries. Aconite, on the other hand, seems to have a special relation to the sensitive power, and to exert no direct influence over contractile or motor structures. The diminution or even destruction of organic sensibility appears to result from the action of prussic acid, so as to destroy the connection between action and re-action. Now opium is essentially one of the most powerful sedatives we possess, although undoubtedly stimulation may be primarily consequent on its administration under peculiar circumstances. Its action is very general. When freely administered it relaxes all the contractile tissues, and primarily and essentially those which are involuntary. It soon reduces the force of the circulation, and though at first it may tend to produce a state of capillary congestion, yet as soon as the balance of action between the centre and periphery of the circulation is restored somewhat, the capillaries of the surface and of the membranous viscera will be deficient in their usual contents, and lose their natural irritability. Now, with emptied and inactive capillaries, and relaxed contractile fibre, is it not to be expected that the hernial tumour would become reduced in bulk, motionless, insensible, and flaccid?—the intestinal structure is in fact utterly paralysed, and the state which has caused strangulation being removed, as well as the undue internal pressure by which it was originally caused, may we not fairly hope for the spontaneous reduction of the protruded viscus, even as it seemed to occur in the instances which I have adduced?

Experimental enquiry supports the opinion I have advanced respecting the medicinal influence of opium. If the heart, while yet pulsating, be removed from the body of an animal, the muscular contraction will immediately cease on applying a solution of opium, and the same is the case with the vermicular motion of a portion of intestine. The velocity of the capillary circulation is found to diminish on the application of opium; and where a person is under the poisonous influence of the drug, I need scarcely remark that blisters and sinapisms will fail to produce the slightest irritant effect, so completely is organic sensibility destroyed. In conclusion I may remark, that in my experience, the safest and most effectual method of bringing the constitution under the influence of opium, in ordinary cases, is by the repeated and frequent administration of moderate doses; and I am therefore inclined to advocate the same plan in hernia, care being taken to carry the administration to a sufficient extent.

Since writing the above, the influence of æthereal inhalation, in cases of hernia, has come to my knowledge; whether the medicinal action thereof is superior to that of opium remains to be seen; but be that as it may, the lately recorded facts support my view of the pathology of hernia. Mr. Tuson's case, published in the *Medical Gazette*, is especially remarkable. On the abdomen being opened, large masses of intestine escaped, but on æther being used, the bowel returned spontaneously, apparently collapsing rather than contracting under the medicinal influence.

ON ÆTHER-INHALATION IN TETANUS, WITH A CASE.

By W. H. Ranking, M.D., Norwich.

A careful analysis of the recorded experience of the æthereal inhalation in surgical cases cannot fail to convince any unprejudiced person that a discovery has been made, no matter by whom, which is not surpassed in the annals of the healing art. We now know tolerably well what are the circumstances under which it may be exhibited in surgical practice, and when it should be withheld, but of its effects in medical practice we are comparatively ignorant. It has been suggested, amongst other diseases, that tetanus is one in which the stupifying agency of æther would be of great service, but with the exception of myself, I believe as yet no one has had practical demonstration of its effects.* These effects were, as the subjoined case will indicate, not only not beneficial, but to all appearance injurious.

In a disease so uniformly fatal as tetanus, I regard experimentalism, even in the teeth of physiological deduction, as pardonable, otherwise I should not have ventured upon the inhalation of æther in the present case, for I am induced to believe, from a careful noting of the operation of the agent, that it has no power,

* Since the above was written, two trials of æther in tetanus have been recorded,—one in this country, one in France. In the former some slight relief was thought to have been afforded; in the second death was indubitably precipitated by its use.

at all events, immediate upon that portion of the nervous system which we know to be engaged in the manifestation of tetanic symptoms—namely, the spinal marrow. I am aware that this opinion is at variance with that of some French physiologists, Longet among the number, who maintains that æther does induce insensibility of the spinal marrow as well as of the cerebral lobes, though only secondarily to the latter, and when carried to a degree in itself all but fatal; but I still consider, that *therapeutically* considered, æther cannot be employed in diseases of spinal origin, as granting that it is possible to influence that part of the nervous system, it can only be done at the risk of seriously prostrating the functions of the cerebral portion.

If the spinal marrow either cannot be affected at all by æthereal inhalation, or only as secondarily to the production of deeper cerebral insensibility, than most people would consider themselves justified in inducing, it must be obvious, on reflection, that it is not likely to act beneficially in tetanus, for we know that the functions of the true spinal marrow gain an increased intensity by the abolition of the controlling power of the brain. Such being the case, we might expect that the spasms of tetanus, so far from being mitigated, would be aggravated by the inhalation. This was not actually the case in the instance which I am about to record, for the plain reason that inhalation could not be carried on to the point of inducing insensibility. The mere attempt to insert the pipe into the mouth caused the spasms to reappear; and the first contact of the æther vapour with the bronchial membrane induced such fearful convulsions, that to proceed with it was out of the question. In recording this case, however, I would not omit to state, that the inhalation was attempted with a common bladder and pipe; as the more effective instruments which ingenuity has devised in such abundance, had none of them at the time been brought into existence. The case is briefly as follows:—

A man aged about 60, of intemperate habits, but of remarkably fine and athletic proportions, ran a nail through his boot into the sole of his foot, near the ball of the great toe, while walking across some old timber. The accident gave him no uneasiness until the expiration of a week, when he complained of stiffness in the neck, and placed himself under the care of Mr. Coe, a surgeon of Bury St. Edmunds. The next day the tetanic symptoms were general, and my co-operation in the treatment of the case was requested. On visiting the patient, about eleven in the morning, I found the jaw completely locked, the spasms frightfully violent, and considerable opisthotonos; in fact, every symptom was present of tetanus of the most acute character. Our treatment was commenced with the Cannabis Indica, full doses of which were with difficulty got down; but this medicine was for a period omitted in favour of the æther-inhalation, which we determined to essay. A common bladder and pipe being furnished, and two ounces of the purest æther we could obtain being put into it, the patient was got into a bath at 108°, and the inhalation commenced. The warm water had partially relaxed the board-like rigidity of the body, and the poor fellow expressed some relief, when the attempt to insert the pipe again excited a strong spasm. Being however, anxious to persevere, he contrived to push it into his mouth, but the first breath he drew aggravated the spasm in a tenfold degree, the body became perfectly opisthotonic, foam issued from the mouth, and the man altogether presented so frightful a spectacle that we might fairly have been excused had we desisted from that moment. We, however, after allowing the effects to subside, made one more attempt, when the recurrence of the same symptoms convinced us of the worse than uselessness of the proceeding.

The subsequent treatment need scarcely be alluded to, as my object is solely to point out the failure of the æther, but I may state that he was bled largely and continued the cannabis, with some amendment, and in the evening had a tobacco enema, (half a drachm to half a pint of water,) which acted effectually in relaxing the spasms. A warm perspiration ensued, the patient was enabled to open his mouth to the extent of an inch, and expressed himself as in every respect better. He remained quiet for nearly an hour, with a good pulse, when a sudden spasm seized him, in which he died.

OBSTINATE CASE OF CONSTIPATION.

By John Elliott Wood, Esq., Surgeon, Rochdale.

Nancy Sladen, a married woman, the mother of several children, was seized on February 19th, 1847, with pain in the abdomen, vomiting, hiccough, and other symptoms of strangulated hernia. She had been the subject of irreducible femoral hernia for several years. The hernial tumour, however, though large, was not larger than usual, nor more tender to the touch than the abdomen generally. Pills of calomel with croton oil were administered, and injections used, without producing any discharge from the bowels. The symptoms gradually increased in urgency, and on February 21st the usual operation for femoral hernia was practised, the patient being at the time under the influence of æther. The bowel and omentum were found in a natural state, no strangulation existing.

Large doses of calomel were now administered by the mouth, and injections of castor and croton oils diligently persevered in, without any relief to the symptoms. The abdominal tenderness increased; the hiccough and vomiting continued; there was a remarkable anxiety of countenance.

On February 22nd, a solution of morphia was prescribed, which afforded the patient more relief than anything hitherto had recourse to.

From this time to March 31st, a period of *more than five weeks*, croton oil, castor oil, compound extract of colocynth, large doses of calomel, jalap, injections of croton and castor oils, of turpentine, of tobacco infusion, of large quantities of warm water, friction to the abdomen with castor oil, with turpentine, the cold

douche, every remedy, in short, calculated to produce a purgative effect, was tried without effect. The morphia was continued during the whole time with great benefit. Beef tea, jellies, wine, and eggs, were ordered, and taken with appetite.

On March 31st she felt an inclination to go to stool, and parted with a motion, perfectly natural in consistence and colour; this was followed by several others in the course of the day, till she had discharged a very large quantity of fæcal matter. There was no blood, or mucus, or scybalæ, and no portion of intestine voided.

The incision over the hernial tumour, it should be stated, healed in a week. The night before the re-establishment of the action of the bowels, the hernia became large and painful, but was reduced to its usual size by pressure without difficulty.

The patient is now (April 3rd,) in a fair way for recovery, though reduced in strength and flesh.

Rochdale, Lancashire.

Hospital Reports.

HÔPITAL DE LA PITIÉ, PARIS.

A CASE OF ENGORGEMENT OF THE HEART AND INTERNAL ORGANS, PRODUCED BY A SEVERE KICK UPON THE EPIGASTRIUM, AND FOLLOWED BY SYMPTOMS OF INTERMITTENT FEVER, AND PERIODIC NEURALGIA, WITH REMARKS.

(Communicated by SEPTIMUS LOWE, Esq., M.R.C.S.)

History of the case: present attack; symptoms on admission.—Treatment: its effects; progress of the case; convalescence; cure.—Remarks: importance of percussion; nature of the attack; engorgement of the heart, lungs, and liver.—Cause: "anervismie;" benefit derived from bleeding.—After symptoms: "hypernervismie;" intermittent fever; intercostal neuralgia; periodicity referred to the ganglionic system and spleen.

S. P., a female aged 18, admitted into the Hôpital de la Pitié, under Professor Piorry, March 19, 1847. She is a needle-woman, of the ordinary stature, sanguine temperament, and florid complexion. She is a native of Paris, and has resided all her life in the Rue Mouffetard, inhabiting a small ill-ventilated apartment, and sleeping in the same room with eight other persons. She has never suffered from rheumatism or hysteria. About three months since she had a severe cold, with pain in the epigastrium, and loss of appetite, but she was not put under any treatment. Her health has been generally very good. About six o'clock on the evening of the 18th of March, whilst restraining a patient during an attack of hysteria, she received a severe kick in the epigastric region; she suffered but little at the moment, and continued her usual occupations. About one o'clock in the morning of the 19th, she was suddenly seized with violent pain below the left breast, shooting through to the inferior posterior part of the chest on the same side, with very great difficulty in breathing, and considerable anxiety and restlessness; she had no shivering fit nor other premonitory symptom; she did not receive any treatment, and was brought to the hospital at six o'clock the same morning. At present the patient lies upon her back, rolls her head from side to side, throws her arms about, and moans as if in great pain; the skin is moist and natural; the expression of the countenance is anxious, the lips and cheeks are florid; the respiration is hurried and laboured, fifty-five in the minute; she speaks interruptedly, catching her breath between each word. There is no cough, the physical signs of the lungs are quite natural. She complains of severe pain, (which has continued since one o'clock this morning,) shooting through from the xyphoid cartilage to the spine. She states that she feels a tightness about the chest, and a sensation as if she were being suffocated. There are no external marks of injury in the epigastric region. On auscultation, the heart's beat is found to be slower than natural, there is a slight degree of harshness with the first sound, and the sounds are heard over a larger surface than usual. On percussion, the heart is found to be enormously enlarged, measuring from above downwards four inches and a half, and from base to apex five inches and a half; the dulness is very strongly marked; the aorta is also distended; the pulse is laboured and compressible, seventy in the minute. There is no nausea nor vomiting; the large intestines are filled with solid matter, and the stomach is distended with gas; the bowels have not been moved for the last eight days; the liver is somewhat enlarged; the spleen is of the usual size; the urine is natural in quantity and quality; the catamenia are regular.

The extent of the heart being marked out upon the skin with nitrate of silver, Professor Piorry ordered the patient to be bled to the amount of thirty-two ounces; during the bleeding she experienced great relief, and at the conclusion she expressed herself nearly free from pain; the dyspnœa was almost entirely removed, but there still remained some degree of tenderness in the epigastrium. On again percussing the heart, it was found to have diminished to the extent of an inch from above downwards, and three quarters of an inch on its left border; the dulness was much less intense in its character; the aorta was considerably lessened, and the liver was also diminished about half an inch, both on its inferior and superior borders; there was no tendency to syncope, nor was there any sensible effect produced upon the patient's strength; the pulse mounted to eighty, and became firmer, and more natural. Ordered to abstain from all food, and to have a purging enema.

Vespere. About five o'clock she was again attacked with severe pain and dyspnœa. Ordered a grain and a half of opium.

At eleven o'clock the opium was found to have had not the slightest influence in subduing the symptoms, and they had, in fact, become almost as urgent as on her first admission; the heart was again enlarged to about midway between the first limitation and the one made after the bleeding. Ordered to be bled to the amount of thirty-two ounces. After the second bleeding the extent of the heart was found to be diminished considerably within the limitation made

after the former bleeding, and to be, in fact, almost in its normal condition. The distressing symptoms were again completely removed, and the patient obtained a few hours sleep.

20th. About three o'clock this morning she experienced a return of the pain and dyspnœa, but less intensely than before. The heart was found to be in its normal condition, so that a third bleeding was not deemed necessary. A warm bath was ordered, which succeeded in removing the distressing symptoms. At present she is quite calm and composed, but complains of tenderness in the epigastrium and left intercostal spaces; the pulse is regular, compressible, and 78; there is considerable tenderness on pressure over the sixth, seventh, and eighth dorsal vertebræ; the bowels have not yet been relieved. Ordered a warm bath, a mustard poultice to the epigastrium, and a purging enema.

21st. The pain is greatly relieved; the bowels have been moved once; the tongue is slightly furred; no appetite; heart in its normal condition; pulse rather weak and compressible. Ordered low diet. Continue the warm bath and enemata.

22nd. The countenance is again anxious; there is considerable jactitation, interruption in speaking, and catching of the breath. There is not the same kind of dyspnœa which was observed on her admission. She complains of violent lancinating pain, darting through from the epigastrium to the left intercostal spaces and spine, so that she cannot fully expand the chest, or take a deep inspiration, without great agony. The heart continues in its normal state; there is no harshness with the first sound; the large intestines are still filled with fæcal matter, and the stomach is distended with gas. Ordered thirty leeches to the epigastrium, followed by a large linseed poultice; friction over the abdomen with olive oil; a blister over the spine, to be dressed with a quarter of a grain of hydrochlorate of morphia; a purging enema, and a warm bath.

23rd. She had another attack of the same nature last night, which lasted several hours. The bowels have been freely relieved; the pulse is somewhat fuller, and quite regular, 80; there is still considerable tenderness in the epigastrium and spine. Ordered five grains of sulphate of quinine every six hours, in the intervals of the attack.

24th. The attack commenced last night about ten o'clock, with well-marked symptoms of intermittent fever; shivering, which contined ahout an hour; heat, which lasted about an hour and a half, followed by sweating. This was succeeded by the same kind of intense pain as before. Continue the quinine.

25th. She again had an attack last night of the same nature, and at the same hour as the former one. She was ordered ten grains of quinine, which immediately arrested the symptoms, and she remained free until the following day.

26th. There is still considerable tenderness in the epigastrium and spine; the heart retains its normal condition; the bowels are regular; the appetite improved; the tongue is clean. Ordered to continue the quinine and warm baths, and apply a blister to the epigastrium.

From this time until the 29th, the patient had an attack every day, but each day it became shorter and less intense; the tenderness in the epigastrium and spine continued, and she complained of some degree of feebleness.

31st. The tongue is clean and moist; the appetite has returned; she has not had an attack since the 29th. Convalescent. Full diet.

April 2nd. Cured.

Professor Piorry, in remarking upon this case, observed, that if we consider the astonishing progress medicine has made within the last few years,—if we look at the rapid strides it has taken towards perfection, and the degree of certitude in the investigation of disease which is now obtained, we can have no difficulty in admitting it to be a "veritable science;" while chemistry and physics are limited by certain and peculiar laws, or carried away into abstract theory and speculation. Medicine has arrived at such an amount of accuracy and exactitude, that by the assistance of anatomy and physiology, on the one hand, and by that of auscultation, percussion, the use of the speculum, &c. &c., on the other, we can now measure and mark out the different organs with the greatest nicety and precision; and by reasoning upon, and comparing them with, the natural condition, we may detect the almost slightest lesion, and arrive at results the most positive and satisfactory.

The case before us illustrates most admirably the truth of these observations, and is another amongst the many proofs we have lately had of the utility and importance of percussion, and an "organo-pathological" investigation of disease, showing most clearly the surprising light they often throw upon phenomena apparently the most obscure.

This patient was admitted with most distressing symptoms of dyspnœa and troubled circulation, following a severe kick upon the epigastrium. On auscultation nothing abnormal was detected in the lungs, there was a slight harshness with the heart's first sound, and the heart's impulse was extended over a larger surface than natural, but there was nothing positive to point out the true nature of the case. On percussion the heart was found to be greatly enlarged, and the dulness more marked than usual, but it retained its ordinary form. Could it be effusion into the pericardium? Certainly not: for, in the first place, the bruits were not distant or indistinct; 2nd, the rapidity of the attack, and gravity of the symptoms, prevented the supposition; and, 3rd, the shape was altogether different to what is observed in hydro-pericarditis, where, according to numerous experiments made by Professor Piorry, both upon the living and dead subject, the dulness is found to extend upwards and outwards to the left side, and to assume a figure totally different to what is observed either in the normal or the hypertrophied heart.

What then was the true nature of the case? Evidently engorgement of the heart and great vessels, and consecutive engorgement and congestion of the lungs,

liver, and internal organs; and this opinion was rendered more certain by the effects of the treatment, for Professor Piorry has proved, from observations made upon a great number of cases, that *the heart and liver, when engorged and congested, will diminish under the effects of a full bleeding, just as the spleen is observed to contract on the administration of quinine.* But what was the primary cause of this engorgement? Injury of the pneumogastric nerves. We know that the effects of injury of a nerve are partial paralysis, or "anervismie," cramp, and congestion of the parts supplied by that nerve, and this we find to have been the case here; the terminating branches of the right pair being injured, the stomach is first affected, and becomes filled with gas; by reflex action the effects are carried to the heart, its force is lessened, and its energy diminished, and thus being unable to entirely empty itself at each systole, it becomes gradually more and more distended; as the distension goes on, the muscular fibres loose in a great measure their power of contracting; the blood not being propelled onwards, accumulates in the lungs, venous system, and liver. By lessening the amount of the circulating fluid, the heart is emptied, and the blood soon again flows freely through the lungs and liver; and the heart, although its force is still considerably diminished, is again enabled to contract upon and propel this smaller quantity of fluid. But it cannot be expected, that after this enormous distension it will at once recover its former tone; it must have time to regain its lost energy; before this can occur the blood again accumulates in its interior, and embarrasses its action, thus requiring another large abstraction of blood; after which we find it was not only enabled to regain its normal condition, but having now sufficient time to recover its lost force, it continues to act freely and regularly upon the diminished quantity of circulating fluid.

Again, what was the cause of the symptoms of intermittent fever, and exalted nervous sensibility or "hypernervismie"? Injury of the sympathetic nerves. Thus, no doubt, the solar plexus is injured, its sensibility exalted, radiates to the phrenic nerves, causing pain in the epigastrium, to the intercostal spinal nerves, inducing pain in the spine and intercostal neuralgia, so that the patient could not elevate her ribs nor depress the diaphragm without great pain, and thus producing symptoms greatly resembling those of angina pectoris. Again, radiating to the splenic nerves, inducing symptoms of intermittent fever, and determining the periodicity of the neuralgic attacks, for Professor Piorry affirms, that, *we almost never have lesion of the spleen or the nerves which supply it, without some symptoms, more or less marked, of intermittent fever or periodic neuralgia*; and this opinion is strengthened by the effects of the treatment, for we find that the attack was immediately cut short by a large dose of quinine, and the patient completely cured by its continued employment.

It may appear strange to the English practitioner, that in this case, the colon was not at once emptied by a brisk purgative, but on considering the condition of the stomach, which was filled with gas, and partially paralysed, it will be seen that the use of purgatives was quite contraindicated, and that the best method of relieving the bowels was the friction over the abdomen with olive oil, and the employment of purging enemata,—the means so much insisted upon by the French physicians in almost every case where there is no imflammation of the viscera.

Paris, April 3, 1847.

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, APRIL 21, 1847.

The popular inclination to remark and speculate upon the weather and its effects, as manifested in our daily salutations and conversation, is singularly at variance with the actual state of knowledge on the subject. We are all more or less disposed to comment on atmospheric variations,—to anticipate their occurrence and nature,—to give due credence to every busy weather-prophet who believes himself able to foretel a coming change, and to draw from such predictions, conclusions of future weal or woe; but there are few who follow the course of careful observation, and still fewer who avail themselves of recorded facts, or attempt in a philosophical spirit to deduce the laws on which this part of the system of nature is governed, with a certainty and precision as unerring as those which regulate the motions of the heavenly bodies.

There are various reasons for this neglect of genuine philosophical investigation on a subject in which all the world professes to be, and is, hourly and deeply interested. The problem to be solved involves many conditions, requires multiplied observations carefully followed out for long periods of time, which must be made by many different individuals differently circumstanced as to locality, and these observations must be accurately comparable together. The limits of error are therefore necessarily wide, and the intricacies of the subject such perhaps as not to be included within their influence. We are not however, here, to enter upon a treatise of meteorology; nor is it intended to develope the causes why the meteorologist has hitherto failed to detect the laws which regulate atmospheric changes. The medical philosopher is not called upon to take upon himself to supply the short-comings of a science, which would require for its elucidation the devotion of a whole life. It is, however, within his province to make use of such meteorological details as admit of ready observation, and to endeavour to trace the effects of the varying conditions of the atmosphere in which we live, on the human constitution, and their relations with disease.

Certain of these effects are, it is presumed,

well-known; the prevalence of pulmonary catarrhal affections in the seasons of winter and early spring, and of dysentery, diarrhœa, and cholera at the close of summer and in autumn, is among the established facts of medicine, and has long been attributed to atmospheric changes. Very loose ideas, however, have been entertained of the relation which the condition of the atmosphere in respect to its weight, temperature, moisture, electric state, &c., bears to the prevalence of disease. How far the influence of these physical agents may be primary or secondary, or whether other conditions, which may be termed concomitant, are not concerned, does not always appear. To take an instance, the autumnal gastro-intestinal affections have long been popularly attributed,—and be it remembered that the popular opinion of one age is very generally the expression of the experience, or presumed experience, of past ages,—to the ingestion of certain fruits; the plum season has been termed the doctor's harvest, and an abundant supply of stone-fruit has very commonly been considered the source of much professional emolument. But the experience of last year shews that the consumption of abundance of plums and the presence of intestinal fluxes, however generally they may be concomitant, in respect of time, are not always to be looked upon in the relation of cause and effect. With a very scanty supply of stone-fruit, we had the usual autumnal bowel complaints most extensively prevalent throughout the country, and unusually severe. We may dismiss, therefore, the popular opinion on this point as a popular error, while we must look elsewhere for a cause of the prevalence of intestinal affections in summer and autumn, than to the use of a superabundance of vegetable productions.

The question will then recur, whether the unusual heat and dryness of the preceding summer season were not, one or other, or both, the direct cause of the prevalence of intestinal affections, and consequently, whether these conditions may not always be more or less influential in the production of the same effects in the plum season, whatever may be the supply of that fruit. This is a point for meteorological research.

The real agent, whether cold, humidity, rapid changes of temperature, or other atmospheric condition, in the production of the catarrhal affections of winter, is another subject which requires investigation on similar principles. These affections have been very prevalent and severe during the severe season now drawing to its close, but they have been also prevalent in other seasons of less actual severity. From the admirable reports on the sanatory condition of Paris, published in the *Gazette Médicale*, for 1846, it would seem to be established that the weight and temperature of the atmosphere, whether considered absolutely or in reference to their variations, do not appear to exercise any appreciable influence on health. The degree of humidity of the atmosphere, and the direction of the winds, on the contrary, seem to exert a well-marked influence. Yet if we attempt to trace the effects of temperature and pressure in their extremes, as recorded by various travellers in the arctic regions, in tropical countries, and on the heights of the Andes or Himalaya range, we shall find that both exercise an immediate and direct influence, and it is therefore not an unfounded presumption that a minor effect must be produced by both, within the limits of such variations as occur in our own country and under our own observation.

These, then, are the questions which the medical meteorologist has to determine. Observations are required to attain this desirable end, and we rejoice to see the attention of several of the members of the Provincial Association directed to this point. To appreciate the effects of any one morbific agent on the public health, it becomes necessary, as far as practicable, to isolate it from all others; this can only be partially accomplished, but the end may be attained with much more effect than has hitherto been done. Meteorological observations, with a view of ascertaining the influence of atmospheric changes on the health ought to be carried on in the healthier districts, altogether removed from the influence of such causes of disease as result from over-crowding of the population,—from the accumulation of animal or vegetable miasmata,—from the exercise of arts or manufactures, known to be injurious to health and longevity. The locale must, therefore, be far removed from the influence of the great-town system, and the observations should be carried on chiefly in agricultural districts. With a view of estimating the effects of temperature and pressure, they should be instituted in different localities, some of which may be on the general level, in the most northern and most southern parts of the country, others on different levels; some inland, some maritime. In this manner we may hope to be able to isolate, to a certain extent, even the more general physical agents; and by recording also the diseases amongst the denizens and cultivators of the soil, readily ascertainable from the records of the union medical officers, to estimate their effects.

Review.

On Tumours of the Uterus and its Appendages, (Jacksonian Prize Dissertation.) By THOMAS SAFFORD LEE, Esq., M.R.C.S.E., &c., &c. London, 8vo, pp. 274.

If we were called upon to name the department of pathology, in which the most solid advance has of late years been made, we should without hesitation point to the diseases of the female organs of reproduction. Although we have not exactly grown grey in the practice of our profession, we can, nevertheless, remember the time, when all but the more palpable forms of uterine disease were a dead letter to the majority of practitioners, and to those who pretended to some skill in such matters, the finger was their best agent in diagnosis, and astringent injections their chief means of cure. This reproach, however, cannot now attach either to the multitude, or the individual medical practitioner, excepting by his or their own culpability, for the more general use of the speculum vaginæ, and the publication of such works as the present, have operated in introducing into the study of uterine diseases, a precision, both of diagnosis and treatment, which is only equalled in the diseases of the eye.

Mr. Lee's volume is one of a class of which we would fain see more frequent examples, and we think that the College of Surgeons has displayed a sound judgment in according to it the Jacksonian Prize. It is not like too many practical treatises, a mere compilation, full of crude speculations and hasty generalization, but one which is characterized by so patient an examination of the subjects discussed, and such an evident desire on the part of the author not to move one step in advance of his facts, that it will not fail, we are assured, in impressing the reader with an entire confidence in the writer's truthfulness and capacity for correct observation.

The matter contained in the volume is distributed under three divisions.

1. Tumours of the uterus, comprising tumours of the walls of the organ, polypoid tumours, cauliflower excrescence, and malignant tumours.

2. Tumours of the ovary.

3. Tumours of the vagina and external organs.

Under the first division the author gives us a very complete history of the various benign and malignant growths to which this important organ is subject, commencing with the fibrous tumour, and taking in succession polypoid tumours, soft polypi, cauliflower excrescence, and encephaloid. As a means of diagnosis of all forms of uterine tumour, he speaks favourably of Dr. Simpson's uterine sound, by means of which he states that the important question of the attachment of the growth to the fundus, and of the adhesion or non-adhesion of the organ to the neighbouring parts, may be satisfactorily determined. He however, warns the reader, that in inexperienced hands this instrument is not devoid of danger, and that violent inflammation may be occasioned by its use.

In reference to the operation for the removal of uterine polypi, the author is at variance with Dr. Montgomery and others as to the dangers of incision. He finds, and we may be sure that in an essay like the present, every available source of information has been searched, that there are at most but two cases on record in which the patient has died from hæmorrhage consequent upon excision of a polypus. The fears of the surgeon have been, we believe, most unnecessarily excited in reference to this operation, and we regard Mr. Lee's statement as well calculated to restore his confidence.

We could easily, and with much satisfaction to ourselves, lengthen the notice of this valuable essay, by the mention of many other subjects treated of in the first part, but as we wish more particularly to direct the reader's attention to the chapter on ovariotomy, we shall here merely state that the diagnosis of uterine polypus, the description of the various modes of operating for their removal, and the chapter on cauliflower excrescence, are particularly worthy of perusal.

The diseases of the ovary occupy the second part of the work, and as the subject is one which has recently been invested with peculiar interest, we shall allude to the author's well-digested opinions on its different bearings at some length. It is a common opinion that encysted dropsy of the ovary attacks females indiscriminately, whether single or married. Mr. Lee finds, on the contrary, that the married are the more liable of the two; of 136 cases, 88 were married, 11 were widows, and only 37 single. These results are certainly opposed to our previous impression, but as we have chapter and verse for this, as for all Mr. Lee's assertions, we are bound to receive them with respect. Another very general opinion exists, that ovarian dropsy affects the left ovary more than the right. This opinion is also reversed by Mr. Lee's investigations.

The pathology of ovarian tumours, the anatomical details connected with the structure of the cyst, the symptoms, diagnosis, and treatment of the disease, are so many points upon which we might with advantage dilate; our space is, however, too limited to allow of our noticing them at the length they deserve, we shall, therefore, devote what space remains to the consideration of two very important subjects connected with the treatment of the disease—namely, the operation of tapping and that of ovariotomy. On both these subjects Mr. Lee speaks *ex cathedra*, and it is but common justice to him to admit that the pros and cons of each operation are most clearly laid down.

The operation of tapping is shewn to be but at best a palliative of very doubtful value, and to be, moreover, in many cases, surrounded by positive and immediate dangers. The consequences, too, of the operation,

are not more favourable, for Mr. Lee finds, that out of a given number, one half died within the space of four months, and that of the latter, half were only tapped once. The cause of death is attributed to inflammation of the sac or peritoneum. These results are exhibited in a table at page 177.

We now come to the operation of excision of the ovary as a curative measure, and here we find Mr. Lee's information to be both extensive and accurate. We must, however, refer the reader to the original for the greatest portion of the details on various matters connected with the operation, contenting ourselves with the following list of conclusions, to which the author has been led by a candid review of the subject:—

"1. That from the difficulty arising in the cure of this disease, the operation of extraction of the cyst has been proposed and performed 114 times, of which number 74 have recovered and 40 died, making the average mortality one in three nearly.

"2. That of these 114 operations, in 24, or rather less than one in five, the operation was obliged to be abandoned, either from extent of adhesions, from the tumour being an uterine or omental one, or from there being no tumour at all, proving indisputably *the difficulties of the diagnosis.*

"3. That in the 90 cases where the tumour was removed, nearly one died to three recoveries.

"4. That the diagnosis of ovarian tumours is very obscure as regards adhesions and the character of the tumour; thus adhesions existed in 46 of the 81 cases where the fact is mentioned.

"5. That where adhesions existed, the mortality was greater, being one death in 2¼.

"6. That the principal recorded causes of death, where it took place soon after the operation, are hæmorrhage and peritonitis.

"7. When death takes place in consequence of the operation it is very rapid. Of 30 patients 14 died within 36 hours, and 25 within a week.

"8. That the character of the disease is of importance with regard to its mortality. In the case of hard tumours the mortality was more than one in two. Of the 16, 9 were cured, 7 died. In 5 the tumour was not removed. When the tumour was composed partly of fluid and partly of solid matter—viz., in 65 cases, 44 were cured, 21 died, and in 14 the tumour was not extracted, making the mortality less than one in three. So that encysted dropsy is more favourable for the operation than hard tumours of the organ.

"9. That as regards the mortality of the two operations, in 85 cases where the major operation was performed, 50 were cured and 35 died, making the mortality 1 to 2½; in 23 where the minor operation was performed, 19 were cured and 4 died, making a mortality of one in six.

"10. That in one of the cases operated upon the tumour was malignant, but that encysted dropsy is not malignant in the ordinary sense of the word."

We now take leave of our author, with a strong conviction that he has written upon a subject which he thoroughly understands, no mean qualification in the present days of medical scribbling; and we most cordially recommend his work as one which should form part of the library of every man who is desirous of improving his professional knowledge. We could wish that this class were more numerous, for it is really painful to meet such numbers of *soi-disant* practical men, who not only do not read, but who make it their silly boast that they do not, hoping, no doubt, that such gasconading may lead to the impression of their own wonderful and innate sagacity.

Lecture, introductory to a Course of Clinical Medicine delivered in the Theatre of Queen's College, Birmingham, on Tuesday, December the First, 1846. By Samuel Wright, M.D., Edin., Physician to the Queen's Hospital, and Professor of Clinical Medicine in Queen's College, Birmingham, &c., &c. London. 8vo., pp. 23.

We are induced to notice this lecture by the Clinical Professor of Queen's College, Birmingham, chiefly because it emanates from one of our Provincial Schools. The observations of its author are highly judicious, and embrace a brief summary of what is expected and required of those entering into the medical profession, to render themselves competent to the serious duties on which they are about to embark. "There is no nobler profession than ours," observes Dr. Wright, in his concluding remarks, "and there is none more responsible. There is something awful in having to take charge of human life: it tells us that we have both a moral and a medical duty to perform to our patients. Never look to the worldly condition of individuals, to know how much professional attention you are to pay them, and what claims they are to have upon your sympathy with their sufferings and anxiety for their welfare." We regret we have not space for the entire passage; it is replete with the highest principles of medical ethics, and happy will it be for the students of the school if such principles seek deep into their minds, and become those on which they shall hereafter be guided in the exercise of their professional calling.

Proceedings of Societies.

BATH AND BRISTOL BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

Quarterly Meeting held at Bristol, Tuesday, March 23, 1847, Mr. Ormond in the chair.

There was a very full attendance, amounting to nearly fifty members and visitors.

Dr. Kay, having expressed his extreme regret at the loss the Society had lately experienced in the death of Dr. Bompas, proposed Mr. Nathaniel Smith as President-Elect, to supply the vacant office. Mr. Estlin seconded the proposition, which was carried unanimously.

ON THE RESPIRATORY FUNCTIONS: USE OF THE SPIROMETER.

Mr. Hutchinson, of London, having kindly offered to make some remarks in illustration of his paper "On the Capacity of the Lungs and on the Respiratory Functions," and to explain the use of the Spirometer,

then gave a very interesting lecture, illustrated by numerous tables and diagrams, on the respiratory functions, of which the following is an epitome :—

Nothing was correctly known upon the functions of respiration previously to the discovery of the circulation of the blood, the pressure, and composition of the atmosphere, so that our present knowledge upon this subject is comparatively of modern date.

Physiological experiments upon respiration have been so limited, that the student is perplexed with views differing from each other. Two circumstances should be considered before he can correctly draw a conclusion from any research, at least of a pathological or physiological nature :—First, with reference to the number of experiments ; and second, with reference to collateral observations upon the human frame. One where the investigation demands for its solution a multitude of experiments ; another where a very limited number at once establishes the point. The chemist, by *one* experiment, determines the *presence* of carbonic acid gas in the breath ; but the physiologist requires *thousands* of experiments to determine the *quantity* of respired air.

With reference to collateral observations, our comprehension of time, space, and weight, is relative ; no isolated observations in nature, if strictly considered, can be of much value, because a combination of circumstances is precluded. The medical man feels the pulse, auscultates the chest, examines the tongue, observes the countenance, desires to know whether the secreting organs are acting in excess or in deficiency, the sleep natural, the appetite good, &c. ; and upon *combining* these data, he grounds his opinion, and the more numerous his collateral observations, the better he is able to venture his diagnosis. An isolated observation upon two men, touching the quantity of air expelled at one expiration, varied from 80 to 464 cubic inches ; this observation, when viewed alone, is of little use, but the matter is more comprehensible when we add the collateral observations of their height and weight, for by arithmetically reducing one man to the size of the other, the shorter man breathed *within* one cubic inch of what was determined by calculation from the collateral observations. The physician, the pathologist, or the physiologist, will gain little knowledge by weighing and measuring the different organs, if he, at the same time, omit taking the height and weight of the body from whence these organs were taken. The development of man is regulated by some certain and constant capacity or measure of his digestive system, therefore to weigh the constituent parts and omit measuring the whole human frame, is like storing up the measurement of doors and windows without reference to the size of the edifice from whence such observations have been made.

Respiration resolves itself into two grand heads,—Chemical and Mechanical ; our attention is here to be directed to the latter.

The object of this research is to detect pulmonary disease in as early a stage as possible. That the *sounds* of respiration are modified by disease is now generally believed ; it may also be demonstrated that the *quantity* of respired air is also modified or diminished by disease, so that having determined the healthy quantity, the *presence and extent* of pulmonary disease can be measured by the *difference*, and that probably earlier than by any other means.

The subject of this research resolves itself under the following heads :—1st. The quantity of air expelled from the lungs, in connection with other physical observations on the human frame. 2nd. The absolute capacity of the thorax, with cubic, superficial, and longitudinal measurements. 3rd. The respiratory movements and mobility of the chest. 4th. The inspiratory and expiratory muscular power. 5th. The elasticity of the ribs and estimate of the voluntary muscular power. 6th. The effect of decussating, diametric, and oblique power, in reference to the function of the intercostal muscles. 7th. General and practical deductions, to detect disease by the spirometer, with the method of its application. In this abstract the first and last heads only are touched upon.

In determining the healthy standard of respiration, upwards of 2000 men, from 20 different occupations in life, have been examined as follows :—The number of cubic inches given by a full expiration, here denominated the VITAL CAPACITY—the power of the inspiratory and expiratory muscles—circumference of the chest over the nipples—the height and weight—the pulse and number of respirations (sitting)—the age—temperature of the expired air,—and, lastly, general remarks on the vocation and appearance.

VITAL CAPACITY.

Of the quantity of Air expelled from the Lungs.—Man at rest breathes a very limited quantity of air, but by the *deepest expiration immediately following the deepest inspiration* a very considerable quantity can be expelled. To this quantity we affix the term *vital capacity*. To determine this, an instrument, the spirometer, has been constructed, and also a convenient form of scale and standard for taking the height and weight.

To measure the vital capacity, the person must stand perfectly erect, with the head thrown well back, slowly and effectually fill the chest, then as slowly and effectually expel all the air he can into the spirometer, where it is measured.

The vital capacity in man is a *constant quantity*, and is modified by four circumstances,—by HEIGHT, by WEIGHT, by AGE, and by DISEASE.

Effect of Height.—The standing height, and the vital capacity, bear a strict relation, so that by measuring the height of a person, the quantity of air can be determined that *should be breathed* as *necessary* to health. "*For every inch of height, (from 5ft. to 6ft.,) eight cubic additional inches of air at 60° are given out by a forced expiration.*" In measuring the height, no allowance is made for the shoe-heel, nor in weighing, for the weight of the clothes. Let the observation for measuring the vital capacity be made three times, and the greatest noted as the quantity sought for. When an air-bag is used instead of the spirometer, then the mean for the three observations must be taken.

TABLE OF REFERENCE

For the healthy vital capacity in the erect position calculated at the temperature of 60° (Fahr.)

Height.	Vital capacity.	Height.	Vital capacity.
ft. in. ft. in.	cubic in.	ft. in. ft. in.	cubic in.
5 0 to 5 1	174	5 6 to 5 7	222
5 1 „ 5 2	182	5 7 „ 5 8	230
5 2 „ 5 3	190	5 8 „ 5 9	238
5 3 „ 5 4	198	5 9 „ 5 10	246
5 4 „ 5 5	206	5 10 „ 5 11	254
5 5 „ 5 6	214	5 11 „ 6 0	262

Thus, if the height be *above* 5ft. 7in. to 5ft. 8in.. the vital capacity should be 230 cubic inches, if *above* 5ft. 8in. to or *including* 5ft. 9in., 228 cubic inches, and so on. If we recollect any one quantity in this table, the vital capacity at any height can be readily called to mind. For example, at the height of 5ft. 8in. the vital capacity is 230; for every other height add to or subtract 8 cubic inches from 230, which will be the quantity sought for.

Curiously, from this table of stature, we have a direct guide to measure the *healthy* vital capacity, and that through the most active period of life, which may be considered as forty years, from 25 to 65.

The stature does not vary but at the extremes of life, whereas the weight may differ and oscillate to an *enormous* extent in the brief period of a few months, therefore were we to combine the weight as a *guide* to measure the vital capacity, we should be encumbered with calculations for correction too numerous and uncertain to be of much value.

The spirometer is constructed to hold a vast quantity of water, to reduce the expired air (without calculation) to as nearly 60 degrees as possible; but in the extremes of the season, our rooms differ from this by many degrees, therefore a table of the correction for temperature is here introduced. The temperature is measured by any thermometer in the room, not necessarily connected with the spirometer.

The vital capacity, as given in the above table, will be observed to increase in arithmetical progression, the series derived from observation (which for comparison is placed in juxta-position in the memoir,) corresponds so nearly to this, that the arithmetical series becomes the best guide. So strict is the relation between the vital capacity and the height, that an opinion may be given, touching the physical development of men now "no more"—thus, Dr. Jurin and Dr. Stephen Hales measured about 5 ft. 8 in., and were between 10 and 11 stone in weight, Davy about 5ft. 7 in., Goodwin under 5 ft. 7 in., and Kite upwards of 6 ft. This legitimate conclusion is gathered from the collateral observations, though their height is no where mentioned.

[A table for the correction of temperature in measuring the vital capacity was here exhibited.] To take an instance, if the vital capacity measures 230 cubic inches when the room is at the temperature of 72°, the correction will be 224, at the temperature of 60° (about 1-500 difference for every degree).

Air-bags are constructed so that any person can be examined at home, and afterwards the bag can be adapted to the spirometer for measurement.

Size of the Chest.—There appears, as yet, no direct relation between the circumference, breadth, or depth of the chest, and the vital capacity. A chest 40 inches and one 30 inches in circumference, or a deep and shallow chest, in men of the *same* stature, is expected to measure the *same* vital capacity. A man may expel more air from his lungs than the whole cubic space allotted for the organs of respiration as when measured at death, or a man in health may expel much less air than the cubic measurement of this space. Two men of *different* heights, yet who *sit* the same height, and measure the same round the chest, will yet measure a different vital capacity, from some cause as yet unknown. There is no relation between the stature or weight, and the absolute cubic dimensions of the thorax. A stout man may have large lungs and a spare man small lungs; small lungs are *not* necessarily found in stout men. There is good reason to believe that in a healthy man, there is *no* relation between the extent of mucous surface in the lungs and the amount of aeration or oxidation of the blood. The circumference of the chest increases with the weight in relation of one inch for every 10lbs.

In measuring the chest with a common tape measure, allow a quarter of an inch for a flannel and a quarter for a shirt.

Mobility of the Chest.—The vital capacity and the range of thoracic movement appears to be in strict relation. In men of the same stature, a 40-inch chest with three inches mobility, must measure less vital capacity than a 40-inch chest with 4 inches mobility. Stout men have smaller thoracic mobility than thin men; the amount of aeretion of the blood is regulated by the mobility.

The mobility is *correctly* measured by the spirometer, it can also be estimated (less correctly) by a common tape measure. Note the minimum circumference of the chest after a forced expiration, then cause the chest to be expanded to its maximum and again measured, the difference is the "*Mobility*."

In healthy persons of ordinary weight and middle age of life, (by the tape measure,) the mobility averages three inches, seldom four inches. This observation is valuable and simply accomplished.

Effect of Weight.—The relation between the weight and the vital capacity as yet does not appear definite; yet when observations are more extended, this will be cleared up. In large numbers, to a certain extent, it is apparent, but probably it will never be a guide to determine the vital capacity in solitary cases, because it is difficult to tell a man's *proper* weight.

TABLE OF THE WEIGHT.

In relation to stature on 2648 healthy males of the middle period of life.

Exact stature in inches.	Weight in lbs.	Weight increased by 7 per cent.
61	120	128
62	126	135
63	133	142
64	139	149
65	142	152
66	145	155
67	148	158
68	155	166
69	162	173
70	169	181
71	174	186

According to the present data it may be said the weight (which increases with the height,) does not diminish the vital capacity until the weight exceeds, by 7 per cent., the above weights at each height, and then in the relation of one cubic inch per lb. for 35lbs.; beyond this, probably, it will be found to diminish in a geometrical relation.

For example, if the man of 61 inches weigh 120lbs., he may exceed this by 7 per cent.—8·4lbs. may be added, making 128lbs. (128·4) then the vital capacity may be expected to diminish. ($120 \times 7 = 840 \div 100 = 8{\cdot}4$lbs.) A full meal will diminish the vital capacity from 12 to 20 cubic inches.

Effect of Age.—Time affects the animal kingdom in a two-fold manner—bringing it to perfection and then deteriorating that perfection. From 15 to 35 the vital capacity increases, and from 35 to 65 it decreases nearly $1\frac{1}{2}$ cubic inches per year. Perhaps, generally, age need not be taken into account before 40 or 45, yet it is *considered correct for Insurance Offices* to take it into account from the age of 35.

Intercostal Muscles.—Every external intercostal muscular lamella can elevate the rib *above it, independently* of any other intercostal muscle. The eleven external intercostal lamellæ on either side, can each *independently* lift two ribs, so respiration can be carried on *without* the first or superior rib of necessity being fixed.

GENERAL REMARKS AND PRACTICAL DEDUUCTIONS.

Boerhaave says "scarcely any particle remained in the body which was not more or less concerned in the business of respiration;" therefore this great function must be extensively knit to our well-being. The spirometer is believed to be useful in measuring this function; it is a guage in a two-fold sense,—a measure for mobility, as well as a measure for capacity, because a man cannot breathe without moving. If disease affects the mobility of the body, the spirometer *must* measure this effect.

The discovery of the seat of disease demands the consideration of a number of circumstances—every observation is a link in the chain, leading one way or another, and that observation which can be measured and is capable of *definite* expression, will be found to weigh heavily in our diagnosis. All we know is gathered from physical observation, through the medium of our senses; physical alterations in the conditions and relations of parts, can only be determined by sight, touch and hearing; the more surely these are tested and definitely expressed, the more perfect is our comprehension of any change. No science is useful unless capable of this sure expression; the great epoch in chemistry was the atomic theory, founded on evidence, not involving hypothesis, an arbitrary measure is selected and a luminous explanation of the laws of combination of matter is made apparent. This definite language is *figures*—a language of relative powers. If a man breathe into the spirometer 200 cubic inches of air it is neither 199 nor 201. Two thousand men thus examined demonstrate that the vital capacity is under certain circumstances the same, and it may be proved that by a little training we can measure the most delicate deviation from this constant quantity.

From the mean of many observations in phthisis, in the early stage the vital capacity measured 149 cubic inches *instead* of 224; in the advanced stage, 83 *instead* of 220 cubic inches.

If we express a man's state in such language, we shall feel it beget a confidence pleasing in diagnosis. The physician to an insurance office is at the same time shielded against certain remarks from the actuary or board of directors, that great reproach of the art "its uncertainty."

An example of a book headed and filled up with cases:—

Comparison of Different Persons in Health and Disease.

Initials.	Vital capacity.	Power of Inspiration.	Power of Expiration.	Circumference of Chest.	Mobility of Chest.	Respirations per minute, sitting.	Pulse per minute, sitting.	Height.	Weight.	Age.	Remarks.
A.	240	3.20	5.50	38¼	3¼	20	80	5ft. 9in	12st 9lb	28	Wresder.
B.	300	3.50	5.30	41	3¼	20	83	6 1	13 8	21	Soldier, H. G.
C.	214	3.70	4.20	34	3	18	79	5 6	10 11	23	Thames Police.
D.	464	3.15	3.70	50	4	16	78	7 0	21 8	27	Giant.
E.	80	3.00	3.74	29	3	29	102	3 9⅜	4 7½	35	Dwarf.
F.	108	0.75	0.46	35¼	1¼	40	60	5 11	10 0	60	Phthisical.
G.	80	1.50	2.00	35	1	40	100	5 9	10 0	36	Ditto.
H.	260	0.50	1.30	34	3¼	21	64	5 7	10 1	29	Tympanum ruptured.
I.	222	0.50	1.00	34½	3	16	80	5 6	10 4	40	Hernia.
J.	186	0.70	0.80	36	1½	28	100	5 8	10 3	30	Incipient Phthisis.

Here is expressed as an illustration, this method of observation upon cases actually examined.

The eye at once will perceive a great difference in these ten persons.

The first three are healthy cases; the vital capacity corresponds with the height according to the rule laid down. The inspiratory and expiratory powers are not only considerable, but bear their proper relation to each other. The mobility of the chest is also natural, and the weights are indicative of health. Therefore it may safely be said, these three men have healthy lungs, or, at least, permeable to air, throughout their entire extent. Their respiratory power is indicative of great physical strength.

The fourth case (D.) has a remarkable vital capacity;

but his height is seven feet. The respiratory power of this man is below par, particularly his expiratory power, which indicates that there is some cause existing which prevents his expiratory muscles acting with healthy vigour.

The next case, though measuring a vital capacity of 80 cubic inches, is of short stature, (3 ft. 9¾ in.) This little man's respiratory power appears better than the case of D., though his pulse and respiration per minute is certainly objectionable. He is now dead.

F. and G. are examples of persons labouring under phthisis. The stature shews that their vital capacity is *very* much below the natural standard: instead of 108 it should have been 254, and, instead of 80, 238 cubic inches. Their respiratory *power*s are also much too low—the thoracic mobility two-thirds below the standard. All this disturbance is the effect of serious disease; the number of respirations and pulse are out of proportion.

In casting the eye along the line of figures in the case of H., the striking part is the respiratory power, which is so deficient, while every other observation looks healthy; this was a case of rupture of the membrani tympani. When the man closed his ears, his respiratory power was manifested as nearly three times stronger.

In the case of I., the respiratory power is deficient from hernia being present.

The last case is phthisis in an *early* stage: the measures here are sufficiently marked to excite attention. In one case the tubercular matter was not equal to one cubic inch, yet the diminution in the quantity of expired air was 47 cubic inches.

The most interesting case followed throughout, from the commencement to the termination, is that of Freeman, the "*American Giant.*" This man came over to England in 1842, and, in November of that year, trained for a prize fight; I examined him immediately before his *professional engagement*, when he might be considered in the "best condition." His powers were as follows:—Vital capacity, 434 cubic inches; height, 6 ft. 11¼ in.; weight, 19 st. 5 lb.; circumference of his chest, 47 inches; inspiratory power, 5.0 inches; expiratory power, 6.5 inches. In November, 1844, exactly two years afterwards, he came to town in ill health. I then examined him in the same way as before, twenty times at various intervals, during which his vital capacity varied from 390 to 340, and the mean of all the observations was 344 cubic inches, a decrease of 90, or more than 20 per cent.; his respiratory power had decreased one fifth, and his weight two stone. At this time I took him to two physicians well skilled in auscultation, and they *both affirmed* that they could *not detect* any organic disease. After January, 1845, I lost sight of Freeman, and, in the October following, I was kindly favoured with the following account of him from Mr. Paul, Surgeon to the County Hospital, Winchester:—

"Freeman was admitted into this hospital on the 8th of October, in an extreme state of debility and exhaustion; he was reduced almost to a skeleton, complained of cough, and was expectorating pus in large quantities. Percussion on the anterior part of the chest *under the clavicles* gave on the right side a very dull sound, on the left one much clearer, but still I think less resonant than natural. I made but one attempt at auscultation, but could come to no conclusion, from a rather singular reason,—the ribs were so large, the intercostal spaces so wide, and so sunk in from the extreme state of emaciation to which Freeman was reduced, that I could not find a level space large enough to receive the end of the stethoscope,—could not, in short, bring its whole surface into contact with the chest. Freeman's great debility, and the clearness of the diagnosis from other sources, prevented my repeating the attempt. Freeman, after death, measured 6 ft. 7½ in., and weighed 10st. 11lb. On opening the chest, the lungs on both sides were found adhering by their apices to the superior boundaries of the thorax, and studded throughout their substance with tubercles. The tubercles on the whole were much less numerous in the right lung than in the left; both lungs were nearly healthy at their base; the tubercular matter gradually increased in quantity towards their inner parts, and the apices of both lungs were almost completely occupied by large cavities partly filled with pus, and capable of containing two or three ounces of fluid each. The heart was remarkably small. The rest of the viscera appeared healthy."

It is very remarkable to see that Freeman lost so much weight; in his prime he never appeared stout, but strong and muscular. I have been informed, when he first came to England, his weight was 22 stone; he died 10 stone. His natural height was nearly 7 feet, and he died 6 ft. 7½ in. The spirometer was useful to me in this case, by indicating the commencement of the disease which ultimately caused his death, and that BEFORE THE USUAL MEANS AVAILED.

SHEFFIELD MEDICAL SOCIETY.

Sixth Session, Eleventh Meeting, Feb. 18th, 1847.

The President, Mr. TURTON, in the chair.

DISEASED BONE.

Mr. Thomas exhibited the leg of a female, aged 22, a prostitute, which he had removed in the morning. There was a large and extremely painful ulcer, together with considerable thickening of the periosteum and enlargement of the bone. The æther was used, and produced insensibility in rather less than two minutes and a half. In consequence of great retraction there was difficulty in securing the posterior tibial artery, and the æther was inhaled a second time. During the operation there was some moaning and screaming, but she does not know anything about the operation.

Mr. Thomas also exhibited the blood drawn from a moderately sized opening in the arm of a female aged 29, in the eighth month of pregnancy, for the relief of pneumonia. The coagulum presented the buffed appearance in *every* part.

Dr. Branson laid on the table "Dupuytren, on the Injuries and Diseases of Bones," the new volume of the Sydenham Society.

FIBROUS TUMOUR OF THE DURA MATER.

Dr. Branson exhibited a portion of dura mater from which a tumour, about the size of a small pullet's egg, grew, presented by Mr. Martin to the museum of the Infirmary. The patient was an elderly gentleman. When first seen by Mr. Martin, he was suffering from paralysis agitans of long duration, and extensive sloughing of the hips and sacrum. He had suffered from one or more convulsive attacks, and his habits and disposition had been materially affected by the disease. There was no loss of motion on the opposite side of the body to that on which the tumour was found until a few days previous to death. On inspection *post mortem* the tumour was found adherent to the dura mater, pressing upon the right middle lobe of the cerebrum towards its anterior and lateral part. The substance of the brain in its immediate neighbourhood was in a state of ramollissement. The pia mater beneath the tumour was absorbed, and that surrounding the part much injected. The tumour was of a fibrous nature, which was shown in a microscopical drawing made by Dr. Branson.

Mr. Hunter exhibited a scirrhous breast from a female aged 38, in the centre of which was commencing ulceration, but no retraction of the nipple. The æther had been used in the operation.

INSUFFICIENCY OF THE AORTIC VALVES; DISEASED HEART: BRIGHT'S DISEASE.

Mr. Law exhibited the heart and kidneys of a scissor-grinder, who had suffered most probably from fever prior to admission into the Infirmary. When admitted his symptoms were,—voracious appetite, severe cough, general anasarca, increased space of dulness in the præcordial region, and a loud *bruit de soufflet* accompanying both beats of the heart, heard most distinctly near the cartilage of the fourth rib, and having with the first beat a somewhat musical character. It was obvious that both obstructive and regurgitant disease of the aortic valves existed, with hypertrophy and dilatation of the left ventricle. On inspection *post mortem* a large deposit was found on the ventricular surface of the valve, which it is obvious would offer considerable obstruction to the passage of the blood from the ventricle, and it accounts for the musical character of the bruit which accompanied the first beat, and is precisely the condition of valve which gives rise to eccentric hypertrophy and dilatation of the left ventricle. The insufficiency of the valve was proved by experiment, water passing readily out of the artery into the ventricle. The kidneys were good specimens of Bright's disease, and were most probably, rather than the heart, the cause of the anasarca. The urine was light-coloured, but did not coagulate either with heat, nitric acid, or bichloride of mercury.

Mr. Jackson exhibited Avery's instrument for the inspection of internal cavities.

Dr. de Bartolomé read a paper "On Pericarditis."*

* An abstract of this paper will be given in the next number of the Journal.

Twelfth Meeting. March 4th, 1847.

The PRESIDENT in the Chair.

Mr. Porter, through the kindness of Mr. H. Taylor, V.S., exhibited an apparatus for the administration of the vapour of æther to horses, and explained its construction.

SCIRRHOUS MAMMA.

Mr. H. Jackson then exhibited a scirrhous breast, which he had that day removed from a patient, aged 44, a married woman, who had borne four children, and in whom menstruation still continued at the regular periods. The patient had enjoyed good health, and according to her account, it was only seven months ago that she perceived a slight tumour immediately below the nipple of the right breast. This existed for two months, when it became painful, and the intensity of pain has increased, and also the duration, up to the period of admission into the Infirmary. She could assign no cause for it. The tumour was completely free; no enlarged axillary gland; and, with one important exception, there was every indication of success in the operation. The skin was of a dusky yellowish colour, as after jaundice. The operation was performed, the æther being used. It did not produce the indications recommended to be obtained for twelve minutes, and then there was no upturning of the eye, but rather a fixed state, together with an evident filling of the vessels of the cheeks. Under these circumstances the operation was proceeded with, and on the first incision, the patient uttered screams, and afterwards moans. During the progress of the operation, she sank into a state of insensibility, from which she soon revived. She was not conscious of having uttered any expression of pain whatever, not having felt any, and was not aware of the first incision being made, the first thing which she recollects being an expression made use of by Mr. Thomas, during the securing of the vessels. In about an hour after, when the wound was dressed, she complained of great soreness and pain on the passing of the sutures. The difference between arterial and venous blood was very evident. The scirrhus appeared to have originated just below the nipple, which was retracted, and was about the size of a small orange, and exceedingly firm.

Taking into account the fact of the patient being insensible to pain, although apparently awake to everything when the operation was commenced, Mr. Jackson suggested that it might not be impossible, by repeated trials and careful observation, to establish the point at which all the useful purposes of the æther vapour might be procured, so far as inducing insensibility to pain, without arriving at the apoplectic appearance recommended to be attained previous to the commencement of the operation.

General Retrospect.

PRACTICAL MEDICINE.

TETANUS SUCCESSFULLY TREATED BY TOBACCO INTERNALLY.

Mr. Pridie, of Stockton-on-Tees, reports the following case:—A female, aged 44, injured her arm by falling upon a nail. On examination, a lacerated wound was found near the elbow, but it gave rise to no anxiety until the end of a week, when the granulations were observed to look flabby. Sulphate of copper lotion was applied, and the bowels were freely acted upon by colocynth and elaterium. After this time, considerable difficulty was experienced with the bowels, and on the 14th day after the injury, the patient began to complain of pain in the head and back, with trismus, and rigidity of the legs and left upper extremity. The heart's action was slow and languid, and convulsion followed attempts to swallow. As the tetanic symptoms increased, it was determined to try the tobacco, and accordingly half-an-ounce of an infusion of thirty grains to nine ounces, was given every one, two, or three hours, according to its effect. The bowels acted after the third dose, and the pain appeared less during the paroxysm. The medicine was continued, and on the next day produced great nausea and vomiting, after which the paroxysms abated in frequency. The same plan was persevered in, with the addition of enemata of tobacco, for five days, when opium was added. The tobacco was finally omitted on the eighth day.—*Monthly Journal of Medical Science*, March, 1847.

[This case appears at first sight to afford strong evidence in favour of the remedy employed, but it must be recollected, that, as has been noticed as long ago as the days of Hippocrates, cases of tetanus which survive the fourth day, and become chronic, frequently if not generally do well; we are therefore here at a loss how much to attribute to the tobacco, and how much to the greatly neglected agency of the *vis medicatrix*.]

GALVANISM IN APHONIA.

The following is the description of one of the earliest modes of applying galvanic action to the treatment of disease, and on account of the long continuance of its effects, is thought by Mr. Donovan to hold out considerable advantages:—In the case of a young lady, affected four years with hoarseness, and more or less complete aphonia, blisters, mercurials, &c., had been used without any relief. Her physician, Dr. Grapengiesser, then thought of increasing the action of blisters by galvanism, and accordingly, having vesicated each side of the larynx to the size of a shilling, he covered the excoriated spots on one side with a zinc plate, to which a wire of the same metal was attached, and on the other with a piece of silver. As soon as he brought the two plates in contact, a burning sensation at those spots arose, and the larynx heaved up and down convulsively, with loud sobbing. On alternately breaking and re-joining the contact, these motions became so violent, as to be almost insupportable. After this process had been continued for a quarter of an hour, a watery humour began to run from the excoriated surfaces. The apparatus was removed, and towards evening she began to speak more audibly and the improvement continued next day, but was lost again on the fourth or fifth day. The process was then repeated, with the same results, and the apparatus was left on all night, with the effect of permanently restoring the voice.—*Dublin Quarterly Journal*, Febr. 1847.

EFFECT OF HYDROPATHY ON THE BLOOD.

Lest there should be any amongst us, which I trust there is not, with a tendency to desert legitimate medicine for the crooked ways of water-quackery, we may mention, as a caution, that a German physician, M. Albert, who has had ample opportunities of witnessing the operation of the water-cure, has remarked that persons who have pursued the system uninterruptedly for two or three months, are apt to acquire a habit of body not dissimilar to that of scurvy. The pulse becomes accelerated, soft, and feeble. The patient is subject to palpitations and a continual feeling of lassitude, and eventually suffers from spongy gums and aphthous ulcerations of the interior of the lips and cheeks. From these symptoms M. Albert concludes that the immoderate use of water has a tendency to impoverish the blood.—*Dr. Ranking's Retrospective Address.*

TREATMENT OF APHTHÆ.

Professor Lippich, of Padua, employs, with success, the sulphuric acid against aphthæ, and in syphilitic mercurial stomatitis, when the mucous membrane of the mouth and lips is covered with ulcerations, which render deglutition difficult. He uses the following formula:—R. White honey, 30 grammes; sulphuric acid, 2 grammes. Mix, and make a liniment. In severe cases the proportion of the sulphuric acid may be increased to eight grammes to the same quantity of honey. The ulcerated surfaces are to be frequently touched slightly with this liniment by means of a soft pencil.—*Gazette Méd.* and *Dublin Med. Press.*

Dr. Coudray reports several cases of aphthæ in which the topical application of pure muriatic acid was followed by complete success. In many cases, when the exudation did not occur in thick laminæ, and when it occupied the tongue and lips only partially, it sufficed to use the acid diluted by an equal proportion of water, or two parts of the latter to one of the former. But whenever the pseudo-membranous material was thick, resisting, and yellowish, and the child refused the breast, he had recourse to the pure acid, one or two applications of which caused the separation of the false membranes. Its use, he states, is attended with very little pain, and infants who had been unable to take the breast for several days before, became capable of sucking in a few hours afterwards.

Bretonneau, many years ago, extolled the use of muriatic acid in this form of stomatitis; and again, last year, Trousseau and Delpech called attention to the great efficacy of the *fuming* acid, as one of the most powerful modifying remedies in severe aphthæ. Dr. Coudray, therefore, proposes nothing new. His cases,

it may be also mentioned, belong to the symptomatic species, which supervenes generally in cachectic children, in whom the cure of the stomatitis itself is of much less importance than when it is idiopathic. In the latter instance, it is usually mild, except when epidemic, in which case the most energetic local treatment is of little avail.—*Dublin Quarterly Journal* and *Lancet*.

EXTRACT OF RHATANY AND VAPOUR-BATHS IN ALBUMINURIA.

A man, aged thirty-one, mechanician, was admitted into the Hôpital of La Charité, on the 28th of December, 1846. Fifteen years ago the disease began by a considerable anasarcous swelling of the feet, which lasted three or four years. Erysipelas of the legs appeared, and was dispelled after six weeks, leaving the œdematous swelling by which it had been preceded. This state of things continued, and five years ago the patient entered M. Rayer's ward, where he was treated by aromatic fumigations, iodide of potassium, and warm baths. Under the influence of these measures the dropsy yielded, but the albuminuria persisted. At the end of a week the œdema showed itself again, and the treatment having been instituted anew, a considerable improvement was obtained. Since that period the patient enjoyed uninterrupted health, but the symptoms returned in the beginning of December, 1846, without any apparent cause. The legs and scrotum were considerably infiltrated, and ascites was present; a general sensation of lassitude, and pain in one, sometimes both sides of the abdomen, were complained of; the bowels were confined, the appetite preserved, and frequent paroxysms of cough were observed; the urine was pale, slightly acid, abundant, and contained a large quantity of albumen —coagulable by heat and nitric acid. Every day half a drachm of extract of rhatany was exhibited in a mixture; vapour baths were ordered, and low diet. Under the influence of this treatment, a gradual amelioration occurred, and on the 10th of January the urine contained no more albumen. On the 12th the patient left the hospital, if not completely cured of his renal disease, at least cured of the symptoms which he had laboured under, and which are generally looked upon as characteristic of granular disease of the kidney.—*Medical Times*.

ERGOT OF RYE IN RETENTION OF URINE.

In a recent number of the *Lancet* Dr. Lanyon relates the case of an old man, in whom the catheter was passed several times a-day, on account of retention of urine, but who subsequently found speedy relief from the use of ergot. Thirty grains of this drug were infused in three ounces of boiling water, and of the cold infusion, the patient was ordered to take a third part every six hours. After the third dose, he passed about half a pint of urine without impediment, and the natural function was restored. The case appears to have been one of spasmodic stricture, and the reporter regards the *modus operandi* of the medicine, to have been anti-spasmodic.

[The ergot has frequently been used in cases of retention from loss of muscular tone of the vesical parietes, which are, we believe, the chief cases in which it is likely to prove serviceable.]

SURGERY.

TREATMENT OF BURNS WITH AMMONIA.

M. Guerard has employed a concentrated solution of caustic ammonia in burns for more than 20 years. He states that when he has burned his own fingers in chemical or other experiments, he has dipped them in the solution, or covered the injured part with a compress wetted with it, as the case may be. The application is said speedily to remove the pain, but it should be continued for half an hour to produce a lasting effect; after this the burn requires no dressing. *Annales de Thérapeutique*, 1847.

TREATMENT OF ULCERS BY EXTERNAL HEAT.

Mr. Barnes, of Notting Hill, states that he has repeatedly witnessed the beneficial effects of external heat in procuring the cicatrization of unhealthy ulcers, such as those which are left after the opening of buboes. The heat is applied by holding a red hot cauterizing iron at such a distance above the sore as to communicate a sensation of agreeable warmth. In proportion as the iron cools it is held closer to the wound. He states that he believes this plan to be peculiar to the practice of Malgaigne. The first effect is a cleaner appearance of the sore, then a shining white pellicle spreads over its surface, and cicatrization frequently commences within twelve hours. In two cases it was complete in eighteen hours.—*Lancet*, January 23, 1847.

ON THE TREATMENT OF ANEURISM BY COMPRESSION.

Dr. Bellingham concludes an interesting paper with the annexed summary of some of the most material points bearing upon this method of treatment:—

1. The arteries to which compression is applicable being far more frequently the subject of aneurism than those to which it is inapplicable, compression is calculated to supersede the ligature in the great majority of cases.

2. The cure of aneurism by compression upon the artery between the aneurismal sac and the heart, according to the rules laid down here, is accomplished by the gradual deposition of the fibrin of the blood in the sac, until both the latter and the artery at the part are completely filled. The process is in fact exactly similar to that by which nature effects a spontaneous cure of aneurism.

3. Such an amount of pressure as would cause inflammation and adhesion between the opposite sides of the artery at the point compressed is never required.

4. The pressure should not be so great as to interrupt the circulation in the artery at the point compressed; an essential agent in the cure being that a current of blood should pass through the sac.

5. Compression by means of two or more instruments, one of which is alternately relaxed, is much more effectual than by any single instrument, and in many instances the pressure can be maintained by the patient himself.

6. The treatment of aneurism by compression does

not involve the slightest risk to the patient, and if persevered in cannot fail of effecting a cure.

7. A cure of aneurism effected by compression, according to the rules laid down here, must necessarily be permanent; and in every case in which a cure has been accomplished, the patients have remained well subsequently.

8. The femoral artery remains pervious after the cure at the point at which the pressure had been applied, and no morbid change of any kind is to be detected in either the artery or vein at the side of the compression.

9. When a cure is effected by compression, the vessel is obliterated only at the seat of the aneurism, and the artery at this part is eventually converted into an impervious ligamentous band.

10. Compression effects the cure of aneurism by more simple and safer means than the ligature, while it is applicable to a number of cases in which the operation is contra-indicated or inadmissible.

11. Compression is not necessarily a more tedious or more painful method of treating aneurism than the ligature, while it is much more certain, more likely to be permanent, and is free from all danger.

12. Compression, according to the rules laid down here, has little analogy with the old method which went by this name; and in fact has no greater resemblance to it than the Hunterian operation had to the operation for aneurism which it superseded.—*Dublin Medical Press*, Jan. 20, 1847.

HERNIA OF THE FORAMEN OVALE.

M. Roeser states that hernia of the foramen ovale is a rare affection, and is seldom discovered until after death, unless it is very large. In a case which occurred in his practice six years before, he had himself overlooked the accident. In the present instance he was more fortunate. The patient was a female, aged 30, mother of one child, two years old, and of another aged ten. For six years she had suffered at long intervals from acute pain in the stomach, which arose without apparent cause, and spread over the abdomen, subsiding after the occurrence of vomiting. On February 16th, 1846, she had an attack of the usual pain, but this time it did not subside, although vomiting had occurred as usual. Next day she was bled, and castor oil was exhibited, without effect, and morphia was given. The author saw her on the succeeding day; there had been vomiting in the night without mitigation of the abdominal pains, and there was now an acute burning sensation at the pit of the stomach; the urine had been scanty, and entirely suppressed for twelve hours; she could not lie on either side; when placed in the sitting posture she complained of an acute pain in the bowels; the belly was swollen, and tympanitic, and presented inequalities arising from distended portions of intestine; pulse frequent; no appearance of hernia at the usual apertures. Dr. Roeser was led to examine the pectineal region, when he remarked a tenderness over the left foramen ovale, which was not observed on the opposite side. On a more careful examination, he found at this spot a tumour, the size of a nut, of an elastic feel, and painful. This tumour might have been mistaken for a gland, but that it was more tense, smooth, and less pasty, and escaped under the fingers, while pressure caused an inward pain, which extended to the epigastrium. These symptoms indicated hernia of the foramen ovale. After the taxis had been persevered in for half an hour, the hernia was reduced; there was immediate relief, and in half an hour the bowels were evacuated. The narrator of the case concludes by urging the necessity of examining all the outlets, in cases of colicky pains, and the so-called neuroses of the abdomen.—*Gazette Médicale*, Fev. 6, and *Monthly Journ. of Med. Science*, March, 1847.

ADVANTAGES OF THE FLAP-OPERATION.

In the thigh and leg, after amputation, it not uncommonly happens that everything looks well for a few days, but that then some matter forms, or the limb jerks, or is hot, or the skin gets just a little tight at one part over the bone. In these cases the flap-operation succeeds better than the circular, for it rarely happens that the skin of the circular operation can be got well forward again after it has once begun to retract or become tight, whilst the mass of muscle and soft parts of a flap can often be brought down again after they have contracted very considerably. In the thigh, puncture of the artery, above its division, is readily avoided in the flap-operation, and cannot well be done in the circular. In the leg, the artery may readily be punctured, in passing the knife behind the limb, and wounded above its division; still this is no real objection to the flap-operation below the knee, as the same accident may happen from the use of the catlin. The rapidity of the flap-operation, compared with the circular, is some advantage, but the whole operation is not necessarily shorter, for the number of arteries to be tied in the former case is generally greater than in the latter. During the last few years, the double flap-operation has been performed upon a large number of patients at St. Bartholomew's, by Mr. Stanley, and with the best result. In many of these cases at their termination, the full soft condition of the face of the stump, the complete depression of the bone in the line of the union of the flaps, or beneath the front flap of the thigh, have been most marked; whilst the effects of inflammation, in rendering the stump tense, have been very much less than where the same accident occurred after the circular operation.—*Ormerod's Clinical Observations*, p. 131.

OPHTHALMIA NEO-NATORUM.

Dr. Eschrish states, that in the ophthalmia of new-born infants, he has always effected a perfect cure in a shorter time than usual, (one week,) by surrounding the eye or eyes with a thick layer of mercurial ointment. We should be sorry to trust a severe case of this disease to this remedy, and the Munich physician acknowledges in his paper, that in addition to the mercurial inunction, he uses frequent injections of tepid-water, and when the swelling and discharge have lessened he employs a weak caustic solution. Professor Von Ammon recommends a lotion of six grains of extract of belladonna and ten drops of lime-water to four ounces of distilled water; with this the eyes are to be

steeped every half hour, and in the interim, a bandage wet with the solution, is to be applied over the eyes. His object in using the belladonna is to allay the spasm of the eyelids, and by facilitating the matter to allay the swelling of the conjunctiva and cornea. This certainly is not heroic practice, and few practioners in this country would trust a patient to it alone. Having constantly remarked an extensive state of ulceration in the conjunctiva of the upper lid in the severe forms of this disease, I now generally evert the lid to examine its inner surface as soon as a case presents itself, and we have several times succeeded in cutting short the disease by at once applying a strong solution of nitrate of silver to this part alone. We beg to call the attention of ophthalmic surgeons to this subject.—*Report on the Progress of Ophthalmic Surgery*, in *Dublin Quarterly Journal*, Febr., 1847.

TOTAL ABSTINENCE AND "MEDICAL TESTIMONY."

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I beg to call the attention of your readers to a document which has been signed by more than a thousand medical practitioners of Great Britain, and which is now being extensively circulated in the publications of the different (so called) Temperance Societies. The document is entitled "Medical Testimony," and consists of a declaration of opinion in favor of "total and universal abstinence from alcoholic liquors and intoxicating beverages," on the ground of their being unfavourable to *health*, and for other reasons.

Mr. Dunlop, who has obtained the signatures to this document, brings them before the public with no little natural gratulation. This gentleman is anxious to obtain the signatures of a larger proportion of the 20,000 medical practitioners of Great Britain; and urges upon the advocates of total abstinence, "to take strenuous measures to have the certificate signed as extensively as possible," in their respective neighbourhoods. When a greater number of signatures has been obtained, Mr. Dunlop expects to see changed, "the unscientific principles and hazardous dogmata on the use of alcoholic liquors," which he states, "too much regulate and characterize the practice of the bulk of our medical world."

It is unnecessary to insert the certificate itself. It is more cautiously worded than some others which have been submitted to myself, for the purpose of obtaining my signature; but still I must regard several of the assertions which it contains as unproved, and consequently rash and dangerous. Many of the distinguished physicians and surgeons, who have signed the document, have, I doubt not, done so deliberately and advisedly: some of them I know to be themselves consistent abstainers from all alcoholic and fermented liquors; and, however I may dissent from their opinion, it nevertheless claims and secures my respect. With others, and, perhaps, the majority, the case has been far different. The act has not been, I think, a deliberate one; the signature has been given with little or no consideration of the evidence on which such propositions, regarded as scientific truths, may be supposed to rest, or of their legitimate consequences, if true. An easy good nature, hardly excusable, has caused the signature of many to be given; and the excellence of the object has probably still oftener led the subscriber to overlook the doubtful character of the means. In some cases I know that the authority of names has been strongly urged against the deliberate judgment of the persons applied to. In other cases, perhaps not a few, it has been urged that signing the document did not in any way pledge the individual conduct of the person signing, and, if I mistake not, such a consideration was actually printed on the form of declaration which was sent for my own signature from a Medical Temperance Society, in February of last year, accompanied by the following note:—

"Dear Sir,—Your signature to the enclosed certificate would be very highly prized by all who are interested in the advancement of the important and wide-spreading principle of true temperance. *An early* reply would much oblige, yours respectfully, ——— ———."

The following is a copy of the certificate which was stated to be "in progress of signature throughout the United Kingdom, and has already been subscribed to by at least 174 medical men:"

"We are of opinion that there is *no* principle of strength or nourishment for the human frame in ALCOHOL, as is commonly supposed, or generally in drinks of which it forms a part, such as ardent spirits, fermented wines, cider, ale, beer, porter, and others. That any trifling portion of nourishment contained in the last three, is greatly exceeded by that in barley-water, porridge, or gruel, made from an equal quantity of grain. That the use of ALCOHOLIC beverages generates ultimate weakness instead of strength, and tends to cause subsequent debility in the frame. That the above-mentioned intoxicating fluids are in no way necessary to persons in ordinary health; nor are they required for any particular constitution. That the daily or habitual use of *any portion* of them is prejudicial to health. That the excitement or cordial feeling they create is mere *stimulation*, which departs in a short time, and is unproductive of any element of real strength; and that, contrary to ordinary opinion, the health and average comfort of the *nation* would be greatly promoted by their entire disuse as *beverages*."

I think that members of the medical profession should pause before they commit themselves to any such opinions as these, for the following reasons:—

1st. Abstinence and temperance are two entirely distinct things: the latter is a virtue; the former, as regards lawful things, is no virtue at all.

2nd. The assertion that the daily or habitual use of any portion of wine or other fermented liquors is prejudicial to health, appears to be altogether at variance with ordinary observation and experience.

3rd. Too little of the vital chemistry of the human body is known for us to assert "that there is *no* principle of strength or nourishment for the human frame in alcohol, or in drinks of which it forms a part."

In the former editions of his "Animal Chemistry," Liebig reckons wine, beer, and spirits, amongst those non-azotized ingredients of our food, which act as elements of respiration, and are expended in the production of

animal heat, and in protecting the organism from the action of the atmospheric oxygen.* (pp. 53, 96.) I have not yet seen the third edition of this well-known work, but from a review† of it, I find that the agency of alcohol, as a respiratory element of food, is illustrated by the following anecdote:—"In England, servants receive daily a certain amount of beer, or in the case of total abstinence, its equivalent in money. A friend informs me, that in a certain household it was observed that from the day on which the servants ceased to receive beer from their masters, the consumption of bread increased in a ratio corresponding to the diminution of beer; so that the beer was twice paid for, once in money, and the second time in the form of an equivalent of another kind of food, yielding the same amount of carbon and hydrogen." (p. 98.)

The reviewer, evidently adopting Liebig's own views, further observes:—"The alcohol of fermented liquors plays the same part in the body of man as the non-nitrogenized constituents of his food; for although its elements do not of themselves possess, at the temperature of the body, the property of combining with oxygen, yet brought into contact with other bodies, during their eremacausis or absorption of oxygen, which are always present in the body, it acquires the property in a higher degree than fat, or other non-nitrogenized substance."

The celebrated chemist, Mitscherlich, has indeed come to the conclusion that alcohol is actually formed in the system from the sugar of our ordinary food, and that subjected to a slow combination in the lungs, it becomes the source of animal heat. I mention this, not as an established truth, but merely to shew that the doctrines of animal chemistry, at the present day, do not confirm the propositions as to the necessarily injurious effects of fermented liquors.

I am not indifferent to the magnitude of the evils connected with intemperance, and I consider that the physician and surgeon are bound to exert their legitimate influence in diminishing the source of so much disease, misery, and death. Let them, however, hesitate before they give their sanction to opinions, hastily taken up, which are not supported by ordinary experience, and not illustrated by their own example. Let them pause ere they bring their character as men of science into question by assertions which are not borne out by well-ascertained facts in physiology and chemistry.

Modern teetotallism is a species of Quixotism, which seems to me to be only redeemed from the charge of absurdity by the reality and extent of the evil with which it attempts to cope. Good has doubtless been effected by it, as it has been by various other popular movements, when directed against evils of great magnitude, in spite of the exaggerated views and ill-directed means with which they have been accompanied and prosecuted. The end, however, does not justify the means; and men of reflecting minds will reject, as more than doubtful, all efforts for good which seek their support in ill-founded views and ill-judged exertions. It is not, however, to be supposed, that fermented liquors which have been used by our species in nearly all climes, and as long as the history of the race has extended, will be disused, on any large scale, or for any long continued period. Let us abolish, if we can, the use of distilled alcohol; let it be found only in the shop of the druggist, and in the warehouse of the varnish maker; and let a crusade be entered only against "excess of wine." Deprive us not, however, altogether of that barley wine, the beer of these more northern countries, with which the poor man has been wont to sweeten his homely meal, after the labours of the day. In warmer latitudes, and for the more affluent, do not deny the temperate and right use of the wine of the grape, intended, as the psalmist tells us, "to make glad the heart of man," and which was used by the founder of our religion, habitually, as well as on the most solemn occasions. I would add, in the words of a recent writer,* "Let moderation be known in all things, and despise not the wisdom of Solomon, who tells us that wine has its uses. Strong drink is more suitable than cold slops for a man with a flagging pulse and sinking heart. The maker of man designed him to enjoy life under a wise use of all that is good: obedience to Divine law allows of no extremes, and temperance implies *in mediis tutissimus* —an equal danger both from abstinence and excess."

I am, Sir,

Yours faithfully,

O

* Moore's "Relation of the Body to the Mind."

* This distinguished chemist farther states, that after alcohol has been taken into the stomach, according to all the observations hitherto made, neither the expired air, nor the perspiration, nor the urine, contains any trace of alcohol, and that there can be no doubt that the elements of alcohol combine with oxygen in the body, that its carbon and hydrogen are given off as carbonic acid and water. p. 239.

† "Med. Chirurg. Review," Jan., 1847

CASE OF POISONING BY THE TINCTURA FERRI SESQUICHLORIDI.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Will you be good enough in your next number to correct a mistake which occurred in the report of the case under the above title in your last. The quantity of the tincture of the muriate of iron swallowed was *one ounce and a half*, and not "a drachm and a half," as erroneously stated. There was no irritation in the urinary system, as in the case mentioned by Mr Taylor, but perhaps there would have been if the smaller doses had been taken, and retained for any length of time in the stomach or bowels. As the mistake is an important one, you would oblige me by inserting this note, or at least by correcting it.

I am, Sir,

Faithfully yours,

THOMAS EDWARD AMYOT.

Diss, Norfolk, April 9, 1847.

ANNOUNCEMENT EXTRAORDINARY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I beg to direct your attention to the following advertisement which appeared in the *Liverpool Mercury* for Friday, April 2nd. It surely behoves the College authorities to notice the mode in which some of its members fulfil the obligations imposed on them.

Your obedient servant,

A MEMBER OF THE ASSOCIATION.

Liverpool, April 6th.

"College of Medicine and Surgery for treating patients on the principles so long and successfully practised at Whitworth, and Oldfield Lane, Manchester, conducted by Mr. ———, M.R.C.S., and L.A.C., prizeman of St. Bartholomew's Hospital, London, in the Session 1843-44, &c., &c., who may be consulted on all cases appertaining to his profession daily from nine to three, and from six to nine, and on Sundays from ten to two, at the College, 46, ————, near the corner of ———— Street. An assistant in continual attendance for any cases of emergency."

[We suppress the name and address, as we have no wish to contribute towards the object which this prizeman of St. Bartholomew's would seem to have in view, but they are at the service of either of the corporate bodies to which the advertiser professes to belong.—Ed.]

Medical Intelligence.

MEDICAL REGISTRATION BILL.

HOUSE OF COMMONS.

[*From the "Notices of Motions" which now stand on the "Order Book" of the House.*]

"On Tuesday, April 20th:—

Mr. Wakley to move for leave to bring in a Bill to provide for the Registration of legally-qualified practitioners in medicine, and to amend the law relating to the Practice of Medicine in Great Britain and Ireland."—*Lancet.*

MEDICAL APPOINTMENTS.

Dr. Arthur Tawke has been elected Physician to the Norfolk and Norwich Hospital, in the room of Dr. Lubbock, deceased. Dr. Ranking, late of Bury St. Edmunds, who is now resident in Norwich, was also a candidate, but retired from the contest, as being too late in the field.

Dr. Francis Henry Woodforde has been appointed one of the Physicians to the Taunton and Somerset Hospital, in the room of Dr. Catlett, resigned.

Dr. A. B. Garrod and Dr. E. A. Parkes have been elected Assistant-Physicians, and Mr. J. P. Potter, Assistant-Surgeon, to University College Hospital.

Dr. A. L. Brownless, of Charterhouse Square, has been elected Physician to the Metropolitan Dispensary, Fore Street.

Dr. Henry Davies has been elected Consulting Physician to the British Lying-in-Hospital. Dr Robert Lee has been elected Physician in Ordinary, and Mr. Benjamin Brookes Principal Surgeon to the same Institution.

J. W. Harris, Esq., has been elected Surgeon to the Exeter Dispensary, in the room of Mr. Pridham, resigned.

QUEEN'S COLLEGE, BIRMINGHAM.

The first sessional examination of the students in the department of general literature and science, was held on Saturday, April 11th, and on Monday, April 13th, 1847, when the following list was returned by the examiners:—

Classics.—1st. CLASS.—Fryer, Coleford; Wall, Stratford-on-Avon; Yarwood, Birmingham; Edney, Craig, Kilmarnock.

2nd CLASS.—Seven.

Mathematics.—1st. CLASS.—Wall, Fryer, Yarwood.

2nd. CLASS.—Edney; Rice, Stratford-on-Avon; Rose, Madeley; Wilkinson, Northleach; A. T. Davies, Birmingham.

3rd. CLASS.—Three.

Chemistry.—1st. CLASS.—Edney, Fryer, Wall.

2nd. CLASS.—Five.

Lyttelton, M.A.,
James Thomas, Law, M.A.,
W. M. Lawson, M.A.,
G. Richards, B.A.,
G. Taylor, B.A.,
George Shaw.
} *Examiners.*

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members, April 9th, 1847:—E. P. Wilkins; E. Lund; C. J. Gibb; R. J. Brackley; C. Mackechnie; W. E. Hayman; R. B. Painter; J. H. Prosser; W. B. Gill.

Admitted April 12th:—J. S. Ayerst; G. N. Ediss; W. P. Harrison; T. Edis; G. B. Barrow; F. Robinson; J. H. Richardson; O. Pemberton; F. Acret; E. C. Cottingham; R. J. Hansard.

The following gentlemen were admitted Fellows on Wednesday, April 14th:—Francis Toulmin, Esq., Clapton; Frederick George Reed, Esq., Hertford.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates on Thursday, April 8th:—Frederick Mason, Bath; Charles Astley Walters, Stockport; Charles John Gibb, Newcastle-on-Tyne; Charles William Izod, Fladbury; Thomas Simpson, Lincoln; Henry John Waterland, Thealby; John Lloyd, Cerrigydwdion; John Jones Parrish, Dudley; Samuel Osborne Habershon, Rotherham; Howard Fred. Johnson, Birmingham; John Packer, London; Richard Branwell, Penzance; John Willan, Kirby Lonsdale; Joseph Marshall, Upwell; Simon Caldcleugh, Durham; Samuel Clewin Griffith, London.

Admitted Thursday, March 25th:—Richard Swan

Finch, Salisbury; William Lascelles Norris, Stourbridge; James White, Chester; Henry Nicholson Settle, Leeds; Thomas Armstrong Cammack, Spalding.

Admitted Thursday, April 1st:—George Burton Payne, Birmingham; Henry Vevers; Thomas Balle Forster, Plymouth; John Lane Cutcliffe, South Molton; George Augustus Hartelbury Hepworth, Tewkesbury; James Tarzewell, Dorchester, Dorset; George Herring, Yarmouth; John Ingman, Trenddyn, Flintshire; William Nowell, Dewsbury; John Jessup Sewell, Fendrayton, Cambridge.

OBITUARY.

Died, March 30th, at St. Albans, aged 53, John Coales, Esq., Surgeon, one of the Magistrates of that borough.

April 11th, at Bishop's Stortford, J. J. Cribb, Esq., Surgeon, late of Cambridge.

BOOKS RECEIVED.

A Treatise on the Human Ear, with New Views on the Physiology of the Tympanum. By J. W. Moses, M.D., M.R.C.S., &c. St. Asaph. 1847. 8vo., pp. 18.

An Essay, Literary and Practical, on Inversio Uteri. By John Green Crosse, M.D., FR.S.. F.R.C.S., Senior Surgeon to the Norfolk and Norwich Hospital, &c. &c. Part II. London: Churchill. 1847. 8vo., plates.

Practical Remarks on the Inhalation of the Vapour of Sulphuric Æther, &c. By W. Philpot Brookes, M.D. London: Churchill. 1847. 8vo., pp. 68.

Our present Gaol System deeply depraving to the Prisoner, and a Positive Evil to the Community. Some Remedies proposed. By Joseph Adshead, Author of "Prisons and Prisoners," &c. 1847. 8vo., pp. 107.

ERRATUM.

At page 180, col. 1, line 12 from the bottom, for "one drachm and a half" read "one ounce and a half."

METEOROLOGICAL JOURNALS FOR FEBRUARY, 1847.

Kept at Sidmouth, by W. H. Cullen, M.D.; at Honiton, by James Campbell, M.D.; at Romsey, Hants, by Francis Buckell, Esq., Surgeon.

	Sidmouth.		Honiton.		Romsey.
Mean of External Thermometer at 9 A.M.	39.48	.....	35.0	.....	25.21
. . . . . 9 P.M.	38.92	at 8 P.M.	36.0	at 9 P.M.	35.70
. . . the Maxima, ...	44.86	.....	42.0	.....	43.80
. . . . Minima, ...	34.00	.....	31.5	.....	30.34
Absolute Mean	38.75	.....	38.0	.....	37.07
. . . . . of ten preceding years.	38.93	.....	.	.....	.
Extreme highest on the 18th	55.	on the 20th	52.0	on the 17th	56.40
. . lowest . . 12th	21.50	on the 12th	18.0	on the 12th	6.00
. . range	33.50	.....	34.0	.....	50.40
Mean daily range	9.65	.....	10.	.....	13.30
Greatest daily range	.	.....	.	on the 14th	35.00
Least	.	.....	.	on the 7th	2.00
Mean Dew-point, at 9 a.m.	35.20	.....	.	.....	.
. . . . . at 9 p.m.	36.30	.....	.	.....	.
Mean of Barometer at 9 A.M.	30.123	.....	29.47	.....	29.382
. . . . . 9 P.M.	30.091	at 8 P.M.	29.51	at 9 P.M.	29.430
Extreme highest on the 22nd	30.451	on the 21st	29.91	on the 28th	29.790
. . . lowest on the 1st	28.840	on the 9th	28.91	on the 8th	28.700
. . . range	1.611	.....	1.00	.....	1.090
Number of days fine	13	.....	14	.....	9
. . . . . dull without rain . . .		.....	.	.....	2
. . . . . on which any rain fell .	10	.....	14	or snow	17
Quantity of rain in inches	1.67	.....	.	.....	
Prevailing Winds, ...	N. SE.	.....	NE. NW.	.....	NW. NE.

TO CORRESPONDENTS.

Communications have been received from Dr. Cullen; a Member of the Association; the Sheffield Medical Society; Mr. C. Hawkins; Mr. J. F. Clark; Dr. Radford; Dr. Holbrook; Dr. Chambers; Mr. G. King; Mr. H. Sharp; Dr. J. Campbell; Mr. Worthington; Mr. Storrs; Mr. H. Stead.

Vaccine Matter.—Mr. P. Fernie, of Kimbolton, Hunts, will feel greatly obliged by any of the readers of the *Provincial Medical and Surgical Journal* supplying him with a small quantity of active vaccine virus.

PROVINCIAL
MEDICAL & SURGICAL JOURNAL.

A SKETCH OF THE HISTORY AND TREATMENT OF INSANITY.

By H. S. Belcombe, M.D., Senior Physician to the County Hospital, and Physician to the Retreat, York.

Valeat quantum!

I commence this paper by acknowledging my obligations to M. José, Membre de l'Institut Historique de Paris, for his able memoir on the "History of Insanity," and for the opportunity thus given me of freely translating a great part of it for the benefit of the English reader. I have, in addition, endeavoured to carry out some views upon the nature and treatment of this singular disease, which, though they may advance no novelty, may merit some attention, as being the result of much experience,—may conduce to calm observation and calmer conclusions,—and may divest the subject of much metaphysical subtlety, in which it has pleased many writers to involve it.

History is an inexhaustible mine, from which science, art, literature, language, politics, can be enriched; and at no period has it been more searched into than at present. The old historians are examined, translated, commented upon in various ways, and perhaps no science has drawn more from this source than that of medicine. Be that as it may, there seems in this wide field a place not equally cultivated; or, to drop all metaphor, it appears to me, that from tracing the periodic history of insanity, some more complete intelligence as to its forms, its mode of treatment, and its cure, is yet to be obtained.

The following paper is merely an attempt at an object which is surely desirable, though I must readily grant that much more time, and much more information, than my leisure or my abilities can supply, are requisite for its fulfilment:—

If insanity is more prevalent now than at any former time, (a position which may be doubted,) it is not so with its causes, which, with the exception of a few, always arising from some dominant action of the period, and connected with the events proceeding from it, are the same to day as formerly. In all times, and under all climates, hereditary constitution, habitual drunkenness, disappointed ambition, wounded feelings, unbridled passions, political even moral antagonism, have been the most ordinary causes of mental diseases.

History affords us, from the Pythoness of Delphi, down to the hallucinated of the Thebaid, and the possessed of the middle ages, the means of classing those cases which have been the subject of many a drama, many an episode, many a romantic tale;* and philosophy can now teach us, that in contemplating such pictures, at once so sad yet so animated, that we there find a perfect reflexion of human nature. It is the picture of humanity, with its passions, its revolutions, its errors, its prejudices, its systems, crimes, and virtues,—a picture so exact, that it is shewn to us without disguise; in it are seen emperors and kings, ministers and courtiers, poets, painters, warriors, legislators, martyrs to chastity, and the victims of incontinence. From Nebuchadnezzar to Saul, from the Greek dramatists, through the history of many of the Roman emperors, let alone that of the early period and of the commonwealth of Rome, down to the times of Rousseau and our own incendiary, Martin, there are not wanting opportunities of writing it fully and entirely.

MENTAL ALIENATION.

It can be established, that the therapeutics of mental disease have been in all times conformable to its etiology, or in other words, that the treatment has always been in relation to the assigned cause of the malady. Thus history shews us mental alienation considered as a disease, *sacred*—sent especially by the Almighty, and so more particularly held in superstitious favour, as among the Pythonesses; or otherwise, as a chastisement from the Divinity, and then its treatment submitted entirely to religious ordinances. The alienated, considered as victims of the anger of the Gods, would necessarily be delivered over to the ministers of their altars, to obtain any relief from their misery. This relief was rarely implored in vain, and not unfrequently the cure was the reward of the ardent faith of the sufferer, let alone the pomp with which the preparatory ceremonies were performed, and the numberless forms to which the patients were subjected before their admission into the sanctuary. If to these be added the rigorous fast during many

* Particularly the madness of Ajax, who, among other vagaries, flogged unmercifully a great ram, whom he took for his rival Ulysses. *Vide* also the madness of Orestes.

days,—the saner faculties worked upon by all the modes that superstition knows how to employ,—the imagination excited by miraculous details,—by the distractions of the voyage,—by the hope of relief from the unknown agent, can it be doubted or wondered at, that frequently some great cure or sensible re-action would take place?

Nevertheless, mental alienation, better studied in its symptoms, in its causes, and in its effects, was deprived by the Pythogoreans of its divine prestige, and reduced to a simple cause, depending upon some affections of the liver—of the spleen—of the stomach—of the brain; then emetics and purgatives became the most usual therapeutical agents, perhaps entirely the whole means. Hellebore, with its mythological reputation, derived from those ages, has descended even into our own; but alas! in our hands it has not produced the miraculous effects that it performed under the administration of Melampus. This physician was an inhabitant of Argos, and in his time did many remarkable things, also performing wonderful cures. Herodotus relates his history; he is also mentioned by Homer, in his "Odyssey."

Hippocrates gave the last blow to this *divine therapeutic*, which the blind zeal of paganism had received; while adopting the ideas of Anaxagoras and Clayomenus, he extended the means of treating insanity according to the etiology he had established. He asserted and proved the beneficial influence upon this disease of other derivatives; also how effectual in the cure were gymnastics, variety of occupation, change of climate, &c.; and hellebore, long considered as a miraculous remedy, was now only proposed to be administered as the most efficient purgative. The impulse being thus given, other observations were presently obtained. Erasistratus was the first to refer maniacal affections to lesions of the nervous centre, and from thence deduced his celebrated cure of Antiochus Soter, who was maddened by his love for his mother-in-law, Phila.

Celsus, who flourished under Tiberius, excelled in his moral treatment (as it is generally called,) of insanity, and has left rules admirably adapted, even for the present time. It is curious, however, that he strongly recommended the modes of severity which for so long a period have cast such a blot upon humanity in the treatment of this affliction.

Aretæus,* after him, occupied himself less with the treatment than the causes of insanity, preparing the way for Cælius Aurelianus,† whose superiority of knowledge can only be appreciated by presenting a rapid exposition of the precepts he has left. Thus:—"The apartment of the patient should be of moderate temperature, lighted by a window from the upper part, on the ground floor, and away from noise, furnished with a bed firmly fixed, and so placed that the patient cannot perceive who enters or goes out. If the excitement prevents the use of the bed, the straw, which must be the next resource, should be well chosen, and conveniently arranged. All wounds and contusions should be carefully washed and dressed. The attendants should be enjoined not to permit visitors, not to exasperate by rudeness or blows, at the same time not using too much condescendence, but letting the maniac see that his faults are known, and that it will be to his advantage to amend them. If an ascendancy be obtained, care should be taken not to compromise it by too frequent visits; the state of the pulse will indicate if bleeding be useful; occasionally it may be necessary to employ restraint, and this should be done with great caution, with as little force as possible; the ligatures should also be made of some soft and pliable substance, otherwise the paroxysm of fury is increased instead of being abated."

Then follows the advice concerning aliment, the evacuations, the indications, where it may be considered necessary to shave the head, to apply cupping glasses, leeches, and revulsives of various kinds. Cælius being much averse to the use of opium, yet anxious to relieve the "insomnium," which he considers of high importance in the case, recommends a hammock, the monotonous and gentle noise of water falling from a height, the application of warm sponges to the eylids.

As occasion serves, recourse should be had to walking, singing, reading, conversation, even the theatre; each patient should be treated in this way according to his accustomed condition of life, and should be induced to feel an interest in his former employments and occupations; every opportunity should be seized of preventing weariness, or the patient relapsing into the thoughts and modes of feeling which may well be called the atmosphere of his malady. In conclusion, Cælius animadverts strongly upon those theoretical practitioners, some who prescribe a complete imprisonment, others total abstinence, others bodily inflictions of punishments, others active refrigerants, others even drunkenness, others music, without discriminating the cases they had to deal with. He was well aware that madness is often the consequence of the abuse of fermented liquors; that music, where it might calm one in ten, would excite the others. So also he attacked those practitioners who recommended love as a means of cure. Is it not absurd to suppose, he says, that love, itself a passion, can ever be the means for promoting a cure of an excitment still more violent. In truth we are obliged to confess, what all well-instructed men must feel, that the ancients have stated what we repeat as new, and that very frequently, we are only very poor plagiarists.

Be this as it may, this doctrine of Cælius Aurelianus,

* Aretæus, the Cappadocian, supposed to have flourished in the time of Vespasian.

† Supposed to have flourished in the second century, and said to be a Numidian.

stamped as it is with the marks that distinguish the true observer, concludes all that we possess from ancient history, on the treatment of mental alienation. The way opened by the genius of the physician of Sicca was never followed by his successors, and for fourteen centuries, the therapeutics of insanity retrograded, so as to equal, if not to surpass, in absurd and barbarous practices, in superstitious prejudices, those of the earliest days of ignorance. Human reason then appeared to soar, only to fall with more violence, like Montaigne's drunken man, who, being set straight on one side, tumbled down on the other.

In the mean while Christianity, in working an entire change in religious belief, altered also very much the frame of human opinions. Eastern imagination vehemently exaggerated the severity of the Christian doctrines. It was soon assumed that man was in a constant strife with the genius of evil, personified in the devil, who from that moment was considered the cause of all the evil both of the intellectual and the moral world;—to him alone was attributed all the different forms of insanity, except those of imbecility and idiotcy, which by a strange confusion of ideas were considered a sort of angelic state and an object of worship. The cause of the disease being thus simplified, the treatment became equally so;—the madman was possessed, and it became necessary to deliver him from the demon. The physician here had nothing to do, the patient entered a religious house, and exorcisms became the only means employed. The Jews seem to have received some additional notions concerning evil spirits and their operations from the Chaldeans, and after their return from the captivity, to have ascribed many diseases and disorders to these invisible agents, besides those which were to be accounted for by natural causes. In this the early Christians followed them, and it is probable that mad, melancholy, and epileptic people were accounted to be possessed, at least for the most part, in the early centuries.

Every form of alienation was considered as so many methods adopted by the demon to manifest his presence in the body of the patient; hence, also, were multiplied all the evils of a disturbed imagination. Compacts were made with the devil,—sorcery—charms—amulets—wolfmen,—all gave a variety to the forms of insanity. All persons labouring under hallucinations were burnt, hung, or suffocated, without pity. All those thought possessed were exorcised. Various places were celebrated for the cure of insanity through the relics of Saints. The pilgrimage to St. Maur, near Paris, was the most celebrated, and continued so, down to 1735. The Abbe Lebœuf tells us that during the four hours which the matins occupied, the patients crowded in the church, cried out with all their might, "St. Maur send me cure and health," and when any one had repeated three times following this prayer, he was judged to be cured; and then, a miracle! a miracle! was shouted out; so great indeed was the uproar, that it was impossible to hear the voice of the preacher. As for those whose violent paroxysms rendered them dangerous, they were placed in the public establishments, and Reil thus draws a picture of their mode of treatment:—"These miserable beings, as if they were prisoners of state, are thrown into the lowest dungeons, where the eye of humanity never penetrates; they are left there under the weight of chains which injure their limbs, and amid the stench of their own ordure. Their appearance is pale and fleshless. They are shown as a sight for public curiosity, and greedy attendants expose them as they would wild beasts. They are crowded together pell mell; fear is the only discipline employed,—whips, chains, the only means of persuasion, until the time comes when nature ends their miseries."

This picture of the treatment of the insane in Germany, applies with a fearful reality to that pursued at the same period in Great Britain, France, Italy, and indeed the whole of Europe. As to the physicians, we find them during this long period of many ages, forgetful of the admirable lessons of Celsus, Aretæus, and Cælius Aurelianus, involving themselves in the ridiculous doctrines of the humoral pathology, concerning black bile and phlegm. Some, however, less the slaves of received prejudices, employed a treatment based upon observation and experience. Alexander of Tralles, Marcellus of Sida, Forestus, Sylvaticus, Sylvius, Professor of Medicine at Leyden, Plater, Sydenham, Sennert, Highmore, Willis, Baglivi, Valsalva, and his disciple Morgagni, have left some useful precepts, but which have had no particular influence upon the progress of the curative treatment of insanity.

At length, in 1792, Pinel appeared. By his persuasion, eighty violent madmen, the terror of their keepers, and reported incurable and dangerous, were freed from their chains, and placed under a mode of treatment, which produced a cure in several of them. Thus was the first blow struck; the mental therapeutics established 1500 years ago by Cælius Aurelianus once more triumphed; bad treatment, corporal violence, was for ever laid aside. From that period psychological medicine, varying its resources according to the forms of the disease, restores to themselves, to their families, and their country, one half of those placed under care. These suggestions were soon listened to in this country, and great effects were made to modify the abuses then so called, and to improve the condition of patients, as well as to establish better principles of treatment. We all know how the Society of Friends came forward for such purposes, but the only remark I will make here is that it was not a love of cruelty that instigated the mal-practices, but erroneous and ignorant impressions.

I think an historical sketch of the almost infinite

varieties of mental alienation is thus worked out, which not only proves its connection with the events of history, but also the impossibility of establishing one particular mode of treatment for all cases; it seems as if four periods could be distinctly marked,—the first, where the disease was presumed to be sent from Heaven, either as a *gift* or a *punishment*, in the latter case alone a cure was solicited by the ministers of the religion; the second, where the malady is referred to a morbid state of some one organ, or of several organs, and then treated by evacuants; the third, where it is attributed to some malevolent being, and then to be subdued by exorcisms or corporal violence; finally, the fourth, in which the etiology of the disorder, better established, perceives the more sensible opinion of the second period, frees itself from the folly and nonsense of the first and third, and so multiplies its curative resources that the general fact is now established, that at least one half of the cases of insanity admitted into public or private institutions are capable of cure.

This is surely a valuable result, but there is a summation to be made. Is there any hope of perfect cure to be obtained? Is there any probability of so grievous, so afflicting a malady being extirpated? I fear not; it is a disorder which spares neither age, nor rank, nor condition, nor fortune; it seems interwoven with the institutions and affections of civilized society; those who are the sufferers are often the victims of the ingratitude, of the perfidy, of the injustice of their social relations and business in the present active community of the world. Neither must we be permitted to forget its hereditary influence, nor the immediate influence of our own passions, desires, and feelings, erroneous education, ambitious projects, mortifying results, and on the other side joyous and successful consequences. All these act with energy upon the human mind, and however mysterious the union of corporate and mental capacity may be, my long experience produces to my mind this deduction,—that there is not a faculty or propensity given for man's condition in this world that may not become deranged, or in other words diseased, like any other function.

One reason of the especial horror with which mental alienation has been heretofore contemplated, may be the want of knowledge of its obvious source in the physical organization. Delirium, as a consequence of fever, is a temporary mania, and however painful its manifestations may be, there seems a cause to which the hallucination may be referred, and its departure expected with the cessation of the exciting cause; but hitherto, in mania, properly so called, there has been a readiness to put a kind of metaphysical or moral construction upon the whole series of distressing symptoms by which it is characterized.

Now, however, a brighter era appears, the morbid manifestations are better understood, the nosology is reconstructed, it is observed to obey certain laws, and experience teaches the practitioner in many instances to be aware of, even to predict, the form of disease that will occur, and in a large proportion of recent cases, a cure is not only expected, but generally performed. Much improvement in the department of the medical treatment has taken place, the routine system of bleeding and purging, which descended from father to son, as stated in a committee of the House of Commons, has been utterly condemned; the secret remedies, the green and white powders, so long the resource of impudent empiricism, have been consigned to oblivion, and a rational practice, founded on rational views, of symptoms as they present themselves, established.

If it be asked what there is that we have to treat in insanity, I grant the question is a difficult one, yet something like an answer may be attempted. Language is not always equal fully to elucidate our ideas, or in other words, our knowledge may not be so exact as to clothe them in appropriate terms. I think this is our great difficulty here, yet I apprehend, that in the various forms of insanity, the cerebral centre is in a state of irritation. We all know how hysteria can simulate every disorder in our nosology, and how long organs may continue to be affected, even to a most suspicious degree of disorganization, yet the part be left intact, untainted, perfect in its work, when the disease has left it; and in this way I think much of the history of insanity may be written, for irritation admits of various actions being conjoined with it. There may be inflammatory action to a certain degree, congestion, local disorder of nerves, yet the irritative form of the disease may be the *most important, progress, decline*, call various sympathies into action, and finally, leave the patient to a happy recovery.

I grant also entirely with Dr. Good, that this diseased state may be a secondary affection, dependent upon a morbid condition of the epigastric or some other abdominal organ,—for in whatever it may consist, and whatever symptoms may arise, it is not till the sensorium is by degrees associated in the chain of unhealthy action that the signs of insanity are unequivocal; also dyspeptic and other abdominal symptoms are not unfrequeutly brought on by a previously diseased state of the mind, and it is hence peculiarly difficult, and perhaps, in some cases, altogether impossible, to determine, where we are not acquainted with the incipient symptoms, whether melancholy or hypochondriasis, has originated in the state of the abdominal viscera, or of the cranium. Where, however, we are made acquainted with the history of the incipient symptoms, we have a tolerable clue to guide us, and the experienced practitioner may for the most part safely decide, that the region primarily affected is that which first evinces morbid symptoms, and hence there will be as little difficulty in assigning the origin of hypochondrism to a morbid

condition of one or more of the digestive organs, as in referring the greater number of cases of mania to a primary misaffection of the brain or the nerves. But in what that misaffection consists, is a question that has never been settled to the present hour, and from our total unacquaintance with the nature of the connection between the brain and the mind, never will be in any very satisfactory manner; "indeed, it seems only by the curtailment or suspension of certain functions, by the excess of others, and by the altered balance and connection of all, that a sort of analysis can be obtained of the nature of mind, which its waking and healthy acts cannot equally afford either to individual consciousness, or the observations of others."—*Dr. Holland.*

I therefore must conceive that he is the most competent to appreciate the nature and peculiarities of insanity, and the best qualified to attempt its dislodgment from the bodily organization, who, fully assured that more or less of physical disorder must necessarily have place in mental hallucination, is at the same time aware of the great difference between mere bodily disease, and the attack upon the nervous centre producing disease of the understanding,—that the distinction of the different kinds of insanity is a matter of much delicacy, for these varieties pass into each other frequently and imperceptibly—that there are grounds for supposing no sensations wholly new are introduced into the mind of a patient by the disease, or that the immediate operation of the senses are perverted, the illusions being principally false combinations of former ideas, with the additional persuasion of their actual existence,—and who has candour and intelligence enough not to form one particular or one exclusive treatment in his system of management.

THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(*Fourth Series of Experimental Researches.*)

By William Addison, M.D., F.R.S., Malvern.

(*Continued from page* 203.)

XII. Regular, Irregular, Retrograde, and Ascending Metamorphoses in the Textures of Plants.

That part of botany which treats of the gradual transmutation of leaves into the various organs of a plant, which shews that bracteæ are leaves affected by the vicinity of the fructification,—that the calyx and corolla are formed by the adhesion and verticillation of leaves,—that the filament is a form of the petiole, and the anther of the lamina,—and, finally, that the ovarium itself is a convolute leaf, is called morphology.

This doctrine seems to have originated with Linnæus, was deeply entered upon by the celebrated Goethe, has been universally adopted in Germany, and been since received in France and England by most of the botanists of the present day.

The first idea of the subject appeared in the second volume of the tenth edition of the *Systema Naturæ* in 1759, and in 1760 the propositions were sustained by Linnæus, in a thesis prepared in the name of his pupil Ullmark, and called the *Prolepsis Plantarum.*

It would be out of place here to enlarge upon botanical facts, about which there is no question, or upon principles regarding the *regular metamorphosis* of plants, which have been firmly established.

"There is not only," says Dr. Lindley, "a continuous uninterrupted passage from leaves to the bracteæ, from bracteæ to calyx, from calyx to corolla, from corolla to stamens, and from stamens to pistillum, from which circumstance alone the origin of all these organs might have been referred to the leaves; but there is also a continued tendency on the part of every one of them to revert to the green parenchymatous texture, and even to the form of the leaf." Examples of *irregular metamorphosis* of some part or other of vegetable structures, are innumerable. Roots and tubers undergo a vast variety of changes, chiefly the effects of domestication. The celery, the root of which is fibrous when wild, produces under domestication a fleshy round root like that of a turnip, known in gardens by the name of celeriac. In short, stem, leaves, flowers, and fruit, exhibit a thousand irregular metamorphoses, for interesting examples of which, the reader is referred to Professor Lindley's "Introduction to Botany."

Examples of a *retrograde metamorphosis* are almost equally numerous. "In the monster *Muscari monstrosum*, a small cluster of branches, covered with minute imbricated coloured bracteæ, is produced in lieu of each flower. Here all parts of the fructification, instead of remaining at rest to perform their functions, are attempting, but in vain, to become organs of vegetation; or in other words, to assume that state from which, for the purposes of perpetuating the species, they had been metamorphosed by nature." The general resemblance of the calyx to the ordinary leaves of vegetation is well-known; its green colour and tendency to revert into as many leaves as it consists of divisions, especially in double roses, is so notorious, that it need not be insisted on. In the cowslip and polyanthus, the calyx is frequently formed of five perfect leaves, in no respect different from the others, except in being a little smaller. Several instances have been observed in which petals have reverted to the state of leaves. In a *Campanula Rapunculus*, seen by Röper, the corolla had become fine green leaves like those of the calyx; the same was found in an individual, of *Verbascum pyramidatum*, described by Du Petit Thouars. Proliferous flowers of Geum and Rosa, in which the petals were converted into leaves, are adduced by Linnæus.

That the anthers are alterations of the margins of petals there is no difficulty in demonstrating. In *Nymphæa* the passage from the one to the other may be distinctly traced. In double roses and camellia's the precise nature of a retrograde metamorphosis is shown in a very instructive way. If any double rose be examined, it will be seen that the filaments of those stamens which are next the petals are expanded and coloured like the petals; and sometimes the perfect lobe of an anther will be found on one side of an abnormal petal, and the imperfect remains of another on the opposite side, proving that the unnatural excess of petals has, in these cases, been produced by a retrograde morphology of the stamens. The conversion or retrogradation of stamens into green leaves is more uncommon, it was seen by Röper in the *Campanula Rapunculus* already referred to, and Du Petit Thouars found the stamens of *Brassica Napus* converted into branches, bearing leaves.

Nothing is more common than to find the pistil converted either into petals or into green leaves. Its change into petals is to be found in numerous double flowers, as for example,—double *Narcissi*, *Hibiscus Rosa-sinensis*, wall-flowers, ranunculuses, saxifrages, and others. Nothing again is more common among roses than to find the ovaria converted into perfect leaves, and the same fact is often met with in the double cherry.*

There are also many instances among plants in which organs advance beyond their natural stage of metamorphosis, attaining a higher, as well as falling back into a lower, type.

In the tulip a bractea is occasionally present upon the scape, a little below the flower, partaking of the nature both of the leaf and the petal. In *Aquilegia vulgaris* the petals consist of a long sessile purple horn, with spreading margin, while the stamens consist of a slender filament, bearing a small oblong yellow anther; in regularly formed flowers, nothing can be more unlike than the petals and stamens, but in some of the double flowers the horned petals are changed into stamens. Several instances are known of ovula being borne by the stamens; it occurs continually in *Sempervivum tectorum*, and Dr. Lindley has seen it in the double Barbadoes lily, and the wall-flower. There is, therefore, as he observes, "no doubt of the truth of the theory of morphology which is now universally adopted by all philosophical botanists."†

It is well known that gardeners, if they wish to have double flowers,—flowers whose pistils have changed to petals, or whose stamens have undergone the same retrograde change, save the seed, (the few at least that may chance be formed in the ovaria of the double flower,) or they select the seed of a more perfect individual, growing nearest to the one whose retrograde changes they wish to perpetuate. Experience tells them in the latter case, that they will be more likely to succeed in their wish to obtain a double flower, than if they chose another plant, growing under the same external conditions of soil, light, heat, and moisture, a few yards off. Hence from this and many other similar facts, it appears that there is an *original inherent disposition* imparted from the parent plant to the seed, in virtue of which alone, independently of external conditions, the young structure will exhibit the same morphological aberrations as those which existed in the stock from which the embryo sprang.

"It is probable," says Dr. Lindley, "that all plants have a particular range, (in some cases more extended than in others,) to which they are best suited, in consequence of their constitutional peculiarities,‡ which become visible by the effect produced from a change of situation, although not otherwise appreciable. The two great external agents by which they are affected, that is to say, soil and atmosphere, will, in their natural situations, be nearly uniform; and so long as this uniformity of the conditions under which they exist continues, their structure will remain unchanged; but let an alteration take place,—their atmosphere, for instance, change from that of the valley to that of the mountain,—the soil from alluvial deposit to chalk or slate, and the mean temperature under which they are found fall several degrees; or remove a plant from its native spot, and cultivate it in the rich soil of a garden, thus submitting it to what may be called domestication. Under such circumstances, an alteration will be produced in the structure of the plant, which will become manifest by external characters. This is what is called irregular metamorphosis. We are ignorant of the specific causes by which the metamorphosis is effected, but we know that it is the leafy texture, and the secreted matter, or proper juices, of the plant, which chiefly manifest their sensibility of change."§

It is evident then, that there are two conditions operating in the irregular or retrograde metamorphoses of plants,—the one a constitutional peculiarity or inherent disposition, derived from parent to offspring; the other, unfavourable external conditions. The former or constitutional disposition may prevail over the most favourable external conditions, and the latter, the external conditions, may modify the morphology of the most perfect embryo, and cause a degradation of its textures. Either of these events would be productive of abnormal form and qualities—that is, of diseased structure.

Before proceeding to the farther consideration of

* The year 1845 was remarkable for a total absence of blackberries, there was hardly a fruited bush to be seen, and on examining the reason it was found that all the pistils were metamorphosed into *bracteæ*.

† See Lindley's "Introduction to Botany," Book vii. Ed. 1832.

‡ Inherent disposition.

§ See "Introduction to Botany," &c.

the phenomena which exemplify, and appear to me satisfactorily to prove, the existence and operation of a morphological law in animal textures, let me recapitulate the points which are settled and established with regard to plants:—

1. *Regular metamorphosis* is the process by which the type, texture, and form, established by Nature for the species, are perfected, and handed down from parent to offspring without fault, deviation, or change. It is the ultimate fact of living structure. Why is it that there is one form, one colour, and one property in one part of a plant, and others in another, &c.? We do not know, all we have to do is to study the normal form and quality of every portion of the structure of the individual during the morphology, so that we may learn the order of Nature, and thereby estimate the kind and nature of observed changes.

2. *Irregular metamorphosis* occurs when parts are checked or stunted in their growth, or when they become unusually exuberant. The structural elements are unchanged, but there is some deficiency or excess. Leaves and fruit undergo manifold changes of this kind, the more observed because the gardener promotes and fosters the irregularity. By an irregular metamorphosis leaves become more succulent and roll inwards, forming what is called a heart, as in the cabbage and the lettuce. If the green parenchymatous texture be exuberant, and extend more rapidly than the veins and margins, they pucker; and if the parenchyma and margin are together in excess, then the leaf is copiously and curiously curled, as in cress, savory, endive, &c., &c.

3. *Retrograde metamorphosis* occurs when the texture and form of a part are completely changed, when later-formed organs assume the structural elements of lower or preceding ones, beyond which, in the natural course of things, they ought to go.

4. *Ascending metamorphosis* is the term applied to parts that do not observe the limits of, but pass above or beyond, the natural type,—as when the sepals of the calyx assume the colour and textures of a petal,—when petals assume the form and function of stamens,—or when stamens bear ovaries.

5. That the causes or conditions operating in these morphological phenomena are two-fold,—external conditions, and the inherent disposition.

(To be continued.)

EXTRACTS FROM AN ESSAY ON PERICARDITIS.

By M. M. de Bartolome, M.D.

(Read before the Sheffield Medical Society, February 18th, 1847.)

Pericarditis is generally defined by authors "An inflammation of the serous membrane lining the pericardium, and covering the external surface of the heart." This definition is, I think, insufficient; for the frequency of this affection consequent upon, or concomitant with, rheumatism, sufficiently shows these diseases to be somewhat analogous, and that, very probably, pericarditis generally, if not always, first attacks the fibrous pericardium, although from the intimate connection existing between the two layers of which the pericardium is composed, the inflammation quickly extends to the serous membrane. Corvisart, whose description of the disease almost all succeeding authors seem to have followed, pertinently enough enquires, "Why the fibrous pericardium should not, like all other solids of a similar structure in the body, be the seat of inflammation?" Analogy, and I may venture to add, facts also, lead to the conclusion, that in very many instances, the inflammation does begin in the fibrous pericardium. Many of the causes of pericarditis are such as produce rheumatism, and still more frequently rheumatism itself is the only assignable cause. Pericarditis often occurs as a vicarious affection on the disappearance of rheumatism; at other times the two diseases co-exist.

As rheumatism undoubtedly is the most frequent source of pericarditis, as it is essentially a disease of the white fibrous tissue, and as the synovial membranes of the joints become affected by it secondarily only, it is very probable, I think, that the fibrous pericardium being a membrane of the white fibrous structure, is the primary seat of the inflammation, and that the serous pericardium becomes affected, in the majority of instances, secondarily only. Laennec relates an example, which I think incontestably proves this to be sometimes the case, in which he found the heart enclosed in a bony case, which sent processes into the substance of the heart, even to its very cavities; and he satisfied himself by dissection, that it was developed between the serous and the fibrous layers of the pericardium. Other strong proofs of the analogy of pericarditis and rheumatism may be found, in the pulse of incipient pericarditis being generally the loose throbbing pulse of acute rheumatism, rather than the hard and tense pulse of inflammation of the serous membranes; and in the two diseases requiring very nearly the same treatment.

In rheumatism, general blood-letting to any extent is deprecated by many authors, as tending to induce a chronic form of the disease, or even pericarditis itself, as is believed by Drs. Fordyce and Alison, whilst local abstraction of blood is freely used. The early symptoms of pericarditis must be promptly met by local bleeding and counter-irritation; but venesection, to any amount, is rarely admissible. Indeed, it was thought by Corvisart, that blood taken from the region of the heart was more efficacious than when drawn from the general system.

Acute rheumatism generally attacks the young and vigorous, so does pericarditis; though the latter disease sometimes attacks children under the age at which they would be liable to suffer from the former; and patients suffering from either, are liable to a recurrence of the disease, and are particularly exposed to suffer from pericarditis if previous attacks of rheumatism should have been treated by copious depletion.

The most common causes of pericarditis besides rheumatism, are blows or excessive pressure on the præcordial region, inflammation propagated along the lungs or pleura, checked perspiration, cold, the abuse of spirituous liquors, and the exanthemata.

Morbid Anatomy.—After the inflammation has attacked the serous pericardium, the morbid alterations it produces may be described according to the four following heads:—Redness and vascularity of the membrane; effusion; formation of false membranes; and their conversion into cellular tissue, fibro-cartilage, bone, &c. But I must confess that I am at a loss how to describe what I consider to be the first stage of the disease—namely, that in which the fibrous pericardium alone is affected; for, as the fibrous tissue in the neighbourhood of joints does not present after rheumatism any pathological appearances, except in a few protracted and very severe cases, we cannot expect to find any morbid alterations in the pericardium when the disease has existed in its fibrous layer only. Thus it happens, as Laennec assures us, that in many instances he could find no trace whatever of the disease, although from the symptoms which had characterized it, he was persuaded that it had been the only cause of the patient's dissolution. In all such cases, I am convinced that the inflammation had existed only in the fibrous pericardium, and had produced its fatal effects by the impediment which it must have offered to the free action of the heart. The case already alluded to as described by Laennec, seems clearly to have been one of this description.

The redness over the pericardium is seldom uniform; sometimes it assumes an arborescent appearance, but most commonly shows itself in small patches, or in dots, alternating with the natural colour of the membrane. This alteration of colour is not invariably present after pericarditis, for Laennec found in some cases, that although the symptoms during life, and the thickness of the false membranes, indicated the inflammation to have been very severe, yet on the most attentive examination, he could discover no redness whatever. Although some have asserted that the redness may have disappeared after death, as it does from the surface of persons who have died of erysipelas, yet I think that the experiments of M. Scoutteten* go far to prove that inflammation of a serous membrane will invariably exhibit increased redness after death.

The effect of inflammation in almost all textures of the body, is the effusion or exudation of a particular morbid secretion. In pericarditis it generally consists of coagulable lymph, accompanied by more or less serum. When only lymph and serum are effused, the latter sometimes exceeds the former in quantity. The effused lymph forms a membranous covering, more or less perfect, on the surface of the pericardium, and according to Laennec, rarely presents the equable surface peculiar to the membranes formed during pleurisy, but on the contrary, it is pitted, mammillated, and rough. The pericardium, whatever changes may be going on within it, is very rarely thickened, the false membranes having been sometimes, according to Dr. Hope and M. Bouillaud, confounded with thickening of the pericardium itself.

Diagnosis.—The diagnosis is not always easy. The disease has been mistaken by some of the best practitioners for affections of other organs, which, on dissection, have been found perfectly healthy. Laennec assures us that he often found on dissection all the evidences of the existence of pericarditis, when nothing had occurred during the life of the patient to excite the slightest suspicion that such a disease was present: and again, that frequently he could find no trace whatever of the disease, when he was sure that it had been the only cause of the patient's dissolution; and he observes that pericarditis is a disorder, the existence of which, during the life of the patient, the most able physicians rather guess at than recognize. Dr. Latham mentions two cases in which the disease was mistaken for disease of the brain, and treated accordingly, but dissection proved them to have been cases of pericarditis. Andral and Corvisart mention two similar cases; the latter was of opinion that the cases where diagnosis was most obscure, were always complicated with pleurisy, pneumonia, or some other disease of the thoracic viscera.

In opposition to this statement may be quoted Laennec, who says that the most complete latent affections he has met with, were in patients whose thoracic viscera were in other respects quite sound, and who had died of disease of the abdomen.

The pulse at the commencement, that is, when the fibrous membrane alone is affected, will generally be found to be that of acute rheumatism, but will vary in proportion as the serous membrane becomes affected; and it is owing to this that the pulse of pericarditis is so different in different subjects, and so variable throughout the course of any particular case. We cannot therefore form our diagnosis by the pulse alone, as it may derive its particular character in some cases not so much from the affection of the pericardium, as from rheumatism in other parts of the body on the one hand, or from inflammation of some other serous membrane on the other.

All authors seem to agree that the most unequivocal sign is the presence of pain over the region of the heart, particularly if aggravated by pressure, in whatever way excited,—whether by full inspirations, change of position, or artificially. This latter circumstance has been known to aggravate it so intensely as to have caused a fit of syncope. "The pain," says Dr. Hughes, "which, according to my experience, is a constant attendant upon rheumatic inflammation of the pericardium, is fairly explicable by the inflammatory rheumatic affection of the fibrous external covering to the serous membrane, the fibrous tissue being the natural seat of rheumatism, of which pain is the most common, if not the universal, symptom."

It is frequently difficult to form a correct diagnosis of this disease. Inflammation of some other thoracic viscus may be readily mistaken for it; and by pressure, should it be applied, we shall excite pain, whether the heart or some other organ within the cavity of

* "Arch. Gen. de Médecine."

the chest be affected. Should this be the case we must mainly trust to the symptoms elicited by auscultation and percussion, which in the generality of cases will be sufficient to guide us; but in some obscure cases of pericarditis, we have only negative symptoms to judge by, and then we must decide of the nature of the case by the absence of such symptoms as characterize disease of other thoracic viscera, as for example, pneumonia, pleurisy, &c.

The inflammation may be said to be on the decline when the fixed pain, if there should have been any, degenerates into diffused uneasiness, and the peculiar vehemence of the heart's action gradually becomes the beat of merely accelerated circulation; but not until all the symptoms have altogether disappeared can we say that the inflammation has terminated. Even when they have entirely ceased, the patient is not for a long time safe against their recurrence, as they very often return when the patient resumes his original avocations. When the motions and sounds of the heart do not entirely regain their healthy standard, we may reasonably suspect that adhesions and lymph still remain.

Physical Signs.—The impulse of the heart is greatly increased, sometimes to such a degree as to be perceptible to the bystanders; it is generally abrupt and irregular. Whenever there is a contraction of the heart stronger than common, the jerking is immediately felt along the arteries. It is this that distinguishes the pericarditic pulse from that produced by merely accelerated circulation. This jerking sometimes remains for months after the inflammation has ceased. Dr. Latham limits the existence of the *bruit de cuir* to rheumatic pericarditis, but I think with Dr. Hope, that it is present in every form of the disease, except when the action of the heart is feeble. The condition which I think necessary for the production of the *bruit de soufflet*, whether in the healthy or diseased heart, is that the valves shall bear a larger proportion than natural, to the orifices which they close; or, in other words, to some impediment to the flowing current of blood. Thus in endocarditis, affecting the valves ever so slightly, the bruit is produced, whether the valves be simply infiltrated or studded with vegetations.

The same explanation may be offered to account for the production of the *bruit de soufflet* after the loss of a large quantity of blood—viz., that the force of the circulation and the quantity of circulating fluid being diminished, the capacity of the arterial tube, and indeed of the circulating system at large, becomes diminished, to adopt itself to the distending force, and the orifices contracting also, cause the substance of the valves to fill up a larger proportion of the area than natural, and to produce the bruit, just in the same way as if they were diseased.

We can easily satisfy ourselves of the truth of this assertion, by projecting a column of fluid through a piece of intestine or a dead artery, and applying the stethoscope over any point of it. When we hold the instrument lightly no bruit is heard, but the moment that we indent the vessel it is produced, distinct in proportion to the pressure employed.

Dr. Alison* does not attach much importance to the *craquement de cuir*, for he says that in many instances the disease runs its whole course without this sign being present, and in a few cases, some of them well marked in every other respect, which have come under my notice, I have not been able to detect it, though I have attentively watched for it.

Treatment.—The list of remedies which can be employed for the cure of pericarditis with decided advantage is rather limited. The abstraction of blood is generally ranked foremost by almost all authors, and of the different modes of accomplishing it venesection seems to be preferred; yet I think that this mode of abstracting blood is far from being absolutely necessary, and that in the majority of cases topical bleeding is preferable,—first, because it answers the same purpose as general blood-letting; and secondly, because it does not produce that distressing debility which seldom fails to follow venesection to any amount, and because it does not excite that reaction, so prejudicial when the lining membranes of the cavities of the heart, and particularly the valves, are affected. Our primary object must be to allay undue excitement of the heart; and general blood-letting has a greater tendency than topical bleeding to excite nervous irritability, which in itself is a cause of hypertrophy of that organ.

That general bleeding is not absolutely necessary, and that provided blood be abstracted the effects are the same in whatever way accomplished, is beautifully proved by a case related by Corvisart. The patient, a woman of middle age, was attacked by very severe symptoms of pericarditis, which were completely arrested on the third day, by the appearance of the menstrual discharge, and although it was unusually scanty and lasted only three days, (instead of nine, the usual period with this woman,) yet it was sufficient to stop the progress of the disease and to keep it stationary.

That topical bleeding by itself is often sufficient, is clearly shown by Dr. Hope, who assures us that he has seen a single, prompt, and abundant application of leeches, or a cupping, at once subdue every formidable symptom. Dr. Alison says, that in rheumatic pericarditis general blood-letting is not advisable, but that the repeated use of local blood-letting is most beneficial; "My results of this practice," he says, "have been much more successful than those of any other." I do not mean to say that I would in no case employ general blood-letting, but merely that I would not do so on every occasion; for, unless the symptoms are very urgent, I consider topical bleeding preferable. In cases where they are pressing I would bleed, though not to a large extent at first, and then trust entirely in patients of strong and plethoric temperament, to cupping, and in those of weak and debilitated constitutions, to leeches. Cupping, where practicable, I consider preferable to leeches, because we can abstract a greater quantity of blood in a less space of time. If the pain and the heart's immoderate action are not subdued by the first topical bleeding, it should be

* Clinical Lectures.

repeated; but sometimes, as already stated, such repetition is unnecessary. When there is pain at the epigastrium, and other signs of gastric irritation, I would recommend the application of leeches to the part, taking care to encourage the bleeding by warm fomentations and light poultices. Next to bleeding I would rank severe counter-irritation. Colchicum, digitalis, and antimonials, I have repeatedly employed with great advantage. The observation applies likewise to mercury.

When the disease recurs it generally has not the same intensity, and is, I think, more under the power of medicine; we should now abstain from employing the same active treatment as during the first attack, and should content ourselves with combating the inflammation by the moderate use of topical bleeding and counter-irritation.

ON SIMPLE ACUTE INFLAMMATION OF THE MEMBRANES OF THE BRAIN IN INFANTS.

By Dr. RILLIET, of Geneva.

(Translated for the Provincial Medical and Surgical Journal.)

(Continued from page 181.)

IV. General Description of the Disease.

Form, Duration, Termination.—Acute meningitis declares itself under two forms, to one of which we give the name of "convulsive," the other "phrenitic." We do not, however, wish it to be understood either that convulsions are never present excepting in the "convulsive" form, or that the "phrenitic" is the form exclusively characterized by perversions of the intelligence; we merely wish to notify by these terms the predominance of certain symptoms.

The convulsive form is most commonly seen in very young infants. It commences suddenly by an attack of convulsions, general or partial, with more or less febrile disturbance. There is neither vomiting nor constipation. When the convulsions, which are repeated at brief intervals, subside, the infant is left either in a state of agitation, or profoundly comatose, with squinting, and sometimes perfect hemiplegia. In certain cases there is an approach to sensibility between the fits, but the amendment is but momentary, and death rapidly approaches either by coma or during a subsequent paroxysm. The convulsive form of meningitis sometimes sets in more slowly, and the convulsions are not so closely approximated. The duration of this latter variety is longer, being from a week to a fortnight.

Phrenitic meningitis is commonly observed in early childhood, and in many respects resembles the acute meningitis of the adult. It commences with fever preceded by a rigor; violent headache ensues, with photophobia, vomiting, and sometimes constipation. The intellect suffers by the end of the first or second day, and the face assumes the peculiar wild look of the disease. Agitation and stupor alternate, and delirium is generally present. Subsequently there is grinding of the teeth, partial convulsions, rigidity of the limbs, a drawing of the head backwards, strabismus, and contraction followed by dilatation of the pupils. About the seventh or eighth day some of these symptoms subside; the vomiting ceases; but the fever still continues; the pulse and respiration are irregular; the belly is retracted, and finally partial convulsions ensue, followed by coma and death.

Diagnosis.—The diseases which are apt to be confounded with acute meningitis, are, as may be imagined, numerous. Before we mention these diseases, we shall enumerate those symptoms of the convulsive and phrenitic forms which are most worthy of confidence in a diagnostic point of view.

In the convulsive form, we should attach great importance:—1. To the constant repetition of convulsions at short intervals. 2. To the acceleration of the respiration, which cannot be accounted for by any pulmonary lesion. 3. To the absence of all visceral inflammation, and of any indication of an exanthematic eruption. In the phrenitic form, the cardinal symptoms are,—intense headache, accompanied by frequent bilious vomiting and constipation, followed by delirium and agitation, alternating with stupor.

Differential Diagnosis of the Convulsive form.—Convulsions in early infancy are very frequently symptomatic; but in this case they are seldom violent or so frequently repeated. Moreover, in the interval, the little patient recovers his sensibility, the respiration is not permanently accelerated, and the pulse quickly regains its normal standard. It must, however, be admitted that in many cases the diagnosis can only be established by the progress of the disease.

The distinction between convulsive meningitis, and other cerebral affections is still more obscure, and indeed it is often impossible. The error is not, however, one of importance, as the treatment, and too often the termination of all is the same.

The first disease which we shall endeavour to distinguish is *hydrocephalus, with infiltration of the pia mater*, the Wasserschlag of Gölis.

In certain cases this condition complicates inflammatory meningitis, and the main features of each are then undistinguishable. In other cases the "hydro-meningitis" is the principal lesion, and we find only slight traces of purulent effusion. This disease, like the one from which we wish to distinguish it, also attacks very young infants; it sets in with fever, and a violent attack of convulsions, or with agitation and stupor, with transient and fallacious signs of amelioration. The analogy between the disease and the convulsive form of meningitis is therefore perfect.

In *hæmorrhage into the arachnoid*, we observe repeated convulsions as the earliest symptoms, but they are in general less violent than in meningitis, and the coma does not ensue so rapidily. According to M. Legendre, children attacked with meningeal apoplexy, exhibit contraction of the fingers and toes,—a symptom which is not observed in meningitis; while, on the other hand, the excitement of the pulse and circulation which are witnessed in the latter disease, are not seen in meningeal apoplexy. *Hæmorrhage into the pia mater* also in some respects resembles convulsive meningitis, but it is a lesion of such rare occurrence that it need scarcely enter into our consideration.

These remarks conclude what we have to say respecting the diagnosis of convulsive meningitis from other organic lesions of the brain; but we must remember that the most important part of the diagnosis of the disease consists in its distinction from essential or symptomatic convulsions, since the treatment of the two forms of convulsion is obviously different.

What we have said in connection with "convulsive meningitis," applies equally to the phrenitic form. Cerebral hæmorrhage, encephalitis, &c., may be confounded with it without any great damage; but it is not so with regard to cerebral congestion, tubercular meningitis, and those sympathetic affections of the brain which arise during the course of the eruptive or typhoid fevers. The following paragraph deserves the earnest attention of our readers:—

Cerebral Congestion.—We have often propounded to ourselves the following question:—Ought we to consider those violent cerebral attacks, which either quickly prove fatal, or as rapidly subside, and the symptoms of which are precisely those which indicate the onset of acute meningitis, as real instances of that disease? *Post-mortem* examination in these cases discovers neither pus nor false membranes, but only simple congestion. Is this congestion to be regarded as the initiative stage of inflammation? The question is difficult of solution; but we nevertheless consider that it should be answered in the negative, and for these reasons:—Inflammatory products of the brain form with such rapidity, that its whole surface may be covered with false membranes in a few hours, consequently the cases we have just mentioned ought to be distinguished from meningitis, both anatomically and by their symptoms. The diagnosis may, however, be here plainly established by the following comparative table:—

Cerebral Congestion.	*Meningitis.*
Declares itself by sudden stupor or more complete insensibility, with dilatation of the pupils; or its first symptoms are acute delirium, with difficult respiration, quick small pulse, and slight convulsions. These symptoms appear almost instantaneously. Vomiting is for the most part absent.	In the phrenitic form, the first symptom is partial or general headache. Delirium does not appear in general until the lapse of twenty-four or thirty-six hours. Vomiting is generally present.

Cerebral Hæmorrhage.—In some cases cerebral hæmorrhage closely simulates acute meningitis. Headache, convulsions, delirium, vomiting, and constipation, mark the onset of both diseases, and it is, therefore, difficult to decide, with certainty, which disease is present. The best guide to a correct conclusion is the high febrile excitement which characterizes meningeal inflammation.

Tubercular Meningitis.—We now arrive at the most important portion of this essay, and shall endeavour to point out the main distinction between simple and tubercular meningitis. For clearness sake we would remind the reader of four circumstances:—1. That diagnosis is to be drawn from the ensemble of symptoms, and not from the individual characters of a disease. 2. The main element in forming our diagnosis is the consideration of the point of time at which the disturbances of the intellect and mobility originate. 3. That the invasion of tubercular meningitis may take place under three different states of the system—1st, after a longer or shorter duration of precursory symptoms; 2nd, during the progress of tubercular disease in other organs; 3rd, in perfect health. 4. That the first and third species are readily distinguished from acute simple meningitis; the error is more likely to be made between the latter and the second form. These preliminaries established, we shall proceed to lay down a brief summary of the differential symptoms as below:—

Simple Meningitis.	*Tubercular Meningitis.*
1. The children attacked are in general vigorous and well-developed, and do not exhibit any signs of tubercle. Their relations too, are healthy.	1. The subjects of tubercular meningitis are delicate, and often precocious children. They are subject to glandular enlargements, and chronic eruptions of the skin. Their blood-relatives generally bear the stamp of the strumous diathesis.
2. The disease may appear as an epidemic.	2. The disease is always sporadic.
3. *Prior condition.*—The attack takes place during robust health, or if it is secondary, it follows some palpable external cause, or arises in the course of a non-tubercular malady.	3. *Prior condition.*—The infant is observed to pine away and lose its flesh and strength. The disposition is altered, the appetite fails, and the *primæ viæ* become deranged.
4. *Mode of attack.*—Violent convulsions, intense fever, quick respiration if the infant is very young; or headache, fever, bilious vomiting. After a lapse of twenty-four hours, excessive agitation, delirium, and prostration.	4. *Mode of attack.*—Convulsions never the first symptoms; the transition from the first to the second period of the disease insensible; the coming on of the second stage marked by headache, vomiting, and constipation; the intelligence sometimes unaffected. When the precursory symptoms are absent, the disease is ushered in by vomiting, moderate headache, and fever.
5. *Symptoms.*—Headache *intense*, vomiting *incessant*, fever *high*, delirium *fierce*, constipation *moderate*.	5. *Symptoms.*—Headache *not intense*, vomiting *not so urgent*, constipation *obstinate*, fever *moderate*.
6. *Progress.*—Rapid; convulsions incessant.	6. *Progress.*—Slow.
7. *Duration.*—Death in 24 hours, in some cases; but generally at the end of the third day.	7. *Duration.*—More prolonged — a fortnight to three weeks.

We have thus gone through the list of the cerebral affections with which simple meningitis may be confounded, we shall now notice the distinction between it and certain formidable cerebral symptoms, which declare themselves without any appreciable lesion of the brain,—as for instance, during the progress of fevers. And first of—

Small-pox.—This disease is sometimes at the onset mistaken for meningitis.. The most important elements in the diagnosis, are the consideration of the reigning epidemic, the lumbar pains, and the time at which delirium appears, which in small pox, is seldom earlier than the third day.

Scarlatina.—In adynamic scarlatina, children frequently complain of headache, and are seized with vomiting. We must look for our guide to the state of the tongue and throat, and the great heat of the skin, taking likewise into consideration the fact of the prevalence of the disease at the time.

Typhoid Fever.—The same rules for forming a diagnosis are applicable in this disease as in small-pox, &c.; but in addition we are to remember, that in typhoid fever the headache is less intense than in meningitis, that the vomiting is less urgent. Some useful information may also be drived from the state of the lips and tongue, the pain in the body, the diarrhœa, and the state of the chest. Moreover, the symptoms which are analogous in the two diseases appear at different periods,—in meningitis at the commencement, in fever towards the termination.

(*To be continued.*)

CASE OF TRAUMATIC TETANUS: ADMINISTRATION OF ÆTHER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I beg to forward you the following brief report of a case of traumatic tetanus in which æther was most successful in arresting the spasm.

On Saturday, March 20th, I was called at 6 a.m., to Charles Prescott, a miner, residing two miles from this place. I found the left arm completely shattered by a large stone falling on it; he had not lost much blood, his comrade had tied a piece of cord tight round his arm, which completely checked the bleeding. He had walked home, a distance of a mile from the shaft where the accident occurred. I immediately amputated below the elbow-joint; three arteries required ligatures. He went on exceedingly well for some days. On Wednesday, the 24th, he was most anxious to get up, and on the wound being dressed, union had taken place by the first intention. On Saturday, the 27th, I found him sitting up and dressed; he said he was quite tired of bed. In the evening he sent down, stating he had taken cold. He had some aperient medicine sent him.

On Sunday the symptoms of tetanus became marked; there was considerable rigidity of the muscles of the neck and jaw, and difficulty in swallowing. He had an enema with turpentine, calomel, and an active aperient, which soon operated. The symptoms continuing, he had thirty minims of liquor opii sedativus, every hour, and belladonna to the neck and jaws. He was perfectly under the influence of opium, but without any remission of the symptoms of opisthotonos.

Monday evening. The spasms now most violent. Half a drachm of æther, added to each dose of opium, and calomel freely given through the night.

Tuesday morning. No better, but decidedly worse. We now determined to try æther. This was administered by means of Boott's apparatus. He was soon under its influence, and immediately all contraction and spasm ceased, and he got into a most comfortable sleep, which lasted full ten minutes. As soon as he became sensible the spasm and contraction returned, but scarcely so violent. He again inhaled the æther with the same result. He had it a third time; it again relieved him, and he was left asleep, and on visiting him I found he could open his mouth better. He was most anxious to have it again, but a violent spasm came on before I could get it to him, followed by another, and he immediately sank.

I am, Sir,
Yours truly,
H. H. BROUGHTON.

Dobcross, near Manchester,
Saturday, April 24, 1847.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF WILLIAM SANDS COX, ESQ.

By PETER HINCKES BIRD, one of the Resident Medical Officers.

(*Continued from page* 184.)

CASE XXVII.

EXTENSIVE INJURY OF THE HAND.

Eli Holloway, aged 15, admitted into the Queen's Hospital, on August 24th. He states that about half an hour previously his hand was severely wounded by a circular saw, which cut off the little finger of the right hand, and severely lacerated the two next; he lost but little blood at the time.

When admitted the little finger was found gone, and there was present a deep lacerated wound on the back of the hand, extending from just below the head of the metacarpal bone of the little finger to that of the middle finger; the metacarpal bones of the middle and ring fingers being shattered. He was rather pale; he did not complain of much pain in the parts; pulse 75, pretty strong.

It was determined that the middle and ring fingers should be removed. An incision was made on the back of the hand below the seat of injury; the metacarpal bones were sawn through, and a flap formed from the palm of the hand; there was not much hæmorrhage; the patient bore the operation remarkably well; the stump was dressed, and a roller lightly applied; he

was then put to bed, and ordered to keep the hand damp with a cold lotion.

26th. Doing well; wound discharges healthy matter; not in any pain; sleeps well.

September 1st. Improving; the wound is looking healthy, and heals rapidly.

10th. Healing; looks healthy; appetite good.

17th. Nearly healed; general health improved.

21st. Quite well.

In injuries of the hand no more should be be removed than is absolutely necessary, but in this case the extensive injury would not permit the attempt of saving more than the thumb and fore-finger, which forms a useful but rather an unseemly member. The fore-finger and thumb are much more useful than the other fingers, for indeed all the delicate movements are performed by them, and should therefore, if possible, be saved; there are other fingers to compensate in some measure for the loss of one, but the loss of the thumb can never be supplied.

Case XXVIII.

NECROSIS.

Edward Ferraday, aged 16, of strumous diathesis, zinc-worker, admitted into the Queen's Hospital April 17th, 1846, under the care of Mr. Sands Cox. He states that about nine weeks ago he dropped off from some height, and sprained his ankle, the foot becoming quite numbed at the time; was under medical care, and had leeches and cold lotions applied, and was lanced near the ankle in two places. He states that he felt two pieces of bone loose before he came into the hospital.

Present state.—There is much swelling about the ankle-joint of the right foot; there are also four fistulous openings, with fungous granulations, three on the inner side, and one on the outer; the ends of the tibia and fibula near the ankle-joint appear enlarged, and feel rough; various depressions can also be felt on the upper third of the tibia; the ulcers discharge a thin flaky pus; the motion of the joint is impaired, it causes him but little pain; the skin is red and shining, and painful to the touch; the redness extends half-way up the leg; appetite good; tongue clean; sleeps well. Ordered to have the parts constantly poulticed.

19th. A small piece of bone was removed from one of the openings this morning.

23rd. Since last report two pieces have been discharged, and another wound formed; he feels easier; health improved.

27th. Two pieces of bone have come away since last report, one of them was about an inch and a half long.

30th. Rather better. To have the wounds dressed with simple dressing, with apertures left for the discharge, which is now thick and yellowish; also to have a damp roller loosely applied.

May 1st. The roller caused much inflammation and pain, so that it was obliged to be discontinued; two of the openings have healed, and the rest discharge a thick healthy pus. To continue the poultice.

22nd. Much better; the inflammation extending up the leg has subsided; two fresh wounds have broken out and discharge freely.

June 27th. Since last report fifteen pieces of bone, some of them an inch and a half long, have come away at various times; is in no pain; can walk about; very little inflammation present; health improved.

July 14th. Seven pieces of bone have come away since last report, two of which came from an opening in the upper part of the tibia.

20th. Much better in all respects; no more bone has come away; inflammation subsiding. To be dressed as before; the fungous edges of the wound require to be touched with Argenti Nitras.

August 3rd. The skin again became red and painful. Apply poultice.

September 21st. Since last report as many as twenty pieces of bone have been discharged; the matter is healthy, and the parts not painful; general health good.

28th. He still remains in the hospital.

The tibia is the most frequent seat of necrosis, and this disease is most common from twelve to eighteen years of age. Every bone in the body is subject to necrosis; but those bones which are superfical, and enter into the formation of the extremities, are more frequently affected than others whose situation is deeper. This case is remarkable for the great number of pieces of bone of various sizes which came away at different times, and also for the slight nature of the accident which is said to have been the cause of the disease. The scrofulous constitution of the patient had probably some share in bringing on the disease.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, MAY 5, 1847.

The law has been compared to a net, through the meshes of which little fishes are allowed to escape, and great fishes to break. Such is very certainly the case in respect to that portion of it which relates to questions of medical practice, and though occasionally one of the smaller fry may be caught, as in the instance of the singularly unfortunate individual whose trial is reported in another column, the exceptional occurrence is chiefly remarkable on account of its extreme infrequency, and the difficulty of securing the captive, who after all, will shortly be returned to his original element, doubtless again to follow up his former malpractices, though perhaps with more cunning and caution, so as to escape the consequences. The mischievous part of the matter is that the judicial institutions of the country are not merely set at nought, but are continually brought into contempt, and the public are fleeced by the cupidity, and miserable sufferers in every way from the ignorance and most culpable rashness, of a host of sharpers, of various

descriptions, who are virtually upheld in their depredations by those whose province it is to protect the unwary from all such designing pretenders.

The spirit of quackery is widely extended through all ranks of the community, and for the simple reason, that with all the outcry about the increase of knowledge, the intellectual pabulum afforded by the literature of the day is of the most unsubstantial and trashy description. The wisdom of the nineteenth century is but a wide spread of shallow waters, and accordingly noisy quackery and superficiality of every kind find favour, when the more solid acquirements which result from study and reflection are neither appreciated nor understood. All ranks of the community, as we have said, are more or less imbued with this spirit of quackery; the main difference is, that the altogether ignorant are caught by the grossest delusions of the itinerant mountebank, who parades his worm-nostrums,—his vegetable powders.—his rapid cures in "cases of secresy," &c.; while the so-called educated classes flock in crowds to fashionable hydropathic establishments, or complacently swallow the infinitesmal doses of fashionable homœopathic doctors, together "with the infinite deal of nothing" in the guise of reasoning, with which the absolute inertness of the one system and the dangerous activity of the other are commonly accompanied.

Cases of manslaughter arising out of the practices of quackery, are becoming fearfully frequent; but it would almost seem, that in the ratio of the ignorance and presumption of the offender, are the chances of his escape from punishment. In the case of Flitcroft, though the man was proved to be an ignorant uneducated person, utterly unacquainted with disease, and every way incompetent, and it was shown that two lives had been sacrificed to his incapacity, had the trial been on a charge of manslaughter, he would, in all probability, have escaped—the rights of a corporate body being considered in the eye of the law more worthy of protection than the lives of the unfortunate individuals who were deluded by his pretensions. And had the offender, instead of being absolutely ignorant of medicine, as he was, been the most accomplished physician or surgeon of the age, he would have incurred the same penalties. In the case of Cronin, where the charge was for manslaughter, though poisonous agents of the most active and dangerous character were prescribed, and where in particular, there was, to say the least, a lamentable and most culpable carelessness, in not sufficiently designating a preparation not to be found in the national pharmacopœia, and for which the formulæ given by different authorities, vary greatly in point of strength and activity,* the offender is allowed to escape. Well does one of our contemporaries, in an admirable analysis of the evidence given on this trial† remark, that "this Cronin case has an influence far beyond that which it derives from the pseudo-scientific evidence given on the occasion; that influence extends to the lives of the public, which are, by the result, left at the mercy of all sorts of prescribers and dispensers,—the neglect of the one and the ignorance of the other are not regarded as culpable; and while we are left to infer, that according to that perfection of reason—the law—there was no criminality in this case, no pains are taken by the legislature to prevent the recurrence of instances of a similar kind."

* See page 247.

† *Medical Gazette*, April 16.

Review.

On the Pathology and Treatment of Scrofula; being the Fothergillian Prize Essay for 1846. By Robert Mortimer Glover, M.D., &c. London, 1846, 8vo, pp. 315. Plates.

From the very extensive analyses which have already appeared of the chapters of this excellent work, which treat of the chemical and microscopical investigations into the nature of *scrofulous* and *tubercular matter*, we shall, in the present notice, devote attention mainly to other points, and more especially to the etiology and treatment of the disease.

Dr. Glover gives a concise, and at the same time, a comprehensive statement of the results arrived at by his fellow labourers in this most interesting field, together with those of his own carefully-conducted investigations and experiments, which entitle him to the greatest credit, both for impartiality and candour. He is a strong advocate for the *identity* of *scrofula* and *tubercle*, as will presently be shown. The analogy existing between them has not been unknown to, or denied by, observant medical men, even prior to the light which chemical analysis and the microscope have thrown upon the subject. Their absolute identity is still, however, a matter requiring farther elucidation, as these means, like morbid anatomy, may be regarded as showing the effects of morbid action, rather than affording information on the nature of such action itself. One thing, however, is certain—viz., that the more intimate our acquaintance with the pathological changes which diseases produce, either in structure or functions, becomes, the more rational also will be the system of therapeutics used for the obviation of such conditions. Dr. Glover's opinion may be at once known by the following brief extract, from pages 25 and 26:—"We adopt, in its fullest extent, the statement of Lugol, which makes scrofula,—*i. e.*, the

actual process of disease,—to be always revealed by the development of tubercles." Did space permit, it would be desirable to examine the arguments which the author, in a true philosophical spirit, has adduced on this part of the question, *pro* and *contra*; this, however, being impracticable, we must reluctantly pass them over. The advocates of the identity of tubercle and scrofula, as already said, rest their views chiefly on the chemical analysis and on the minute structure revealed by the microscope; the first and second chapters which relate to this subject deserve the most attentive perusal and examination.

Chapter III. is devoted to the consideration of the scrofulous diathesis, on which the author makes the following judicious introductory remark:—"A careful distinction should be made between the scrofulous diathesis, or predisposing constitution, and the actual processes of the disease; between the *ens in potentia*, and the *ens in actu*." This chapter, like the preceding, deserves a careful perusal, as in it are given, what are called the characters of the diathesis. Without agreeing in all which it contains, it displays a minute acquintance with the opinions of others, and the capabilities of the author to discriminate and apply them. Here we have the *questio vexata* of complexion discussed, which from long experience we regard as of little moment in a practical point of view, although it is our conviction, that scrofulous disease is most common in the lymphatic temperament, and that this latter is most frequently associated with light colour. Towards the conclusion of the chapter we meet with the following paragraph:—"We agree entirely with Mr. Phillips in assigning the 'Strumous Dyspepsia' of Dr. Todd, when present, rather to the actual disease than to the diathesis. Neither are these symptoms of dyspepsia confined to cases of tubercular deposit." Our reason for noticing this statement is, that we have been long convinced of the influence exerted by derangement of the digestive functions in *absolutely* inducing scrofula in children, who had, previously to the operation of such cause, possesessd not merely the appearance of a sound and healthy constitution, but enjoyed even robust health. This remark applies with peculiar force to the dyspepsia which is so constant a concomitant of teething, and which is but too frequently aggravated by the medical treatment adopted for its relief, more especially by the unnecessary exhibition of calomel. To this source of scrofulous disease we think our author hardly attaches the importance which it fairly claims

Chapter V. is devoted to the "Identity of Scrofulous and Tubercular Diseases." Into the examination of this our limits forbid us to enter, in a manner at all commensurate with the importance of the question, and therefore we are obliged to pass on to Chapter VI., which treats of the "Essential Nature of Scrofula." After objecting to various definitions of the disease, Dr. Glover says,—"Scrofula is a"———"peculiar modification of inflammation, whereby the usual, or, as they may be termed, the normal products of this process are not evolved; but instead of them, other materials, incapable of passing into regular cell-forms, and which constitute the substance already described under the name of scrofulous or tuberculous matter. The peculiarities of this formation, and the continuance of the scrofulous diathesis, are the causes of the characters assumed by the various after-processes which result from the existence of tubercle." This definition is, we conceive, to say the least of it, open to very great discussion. As however constant a degree of inflammation may be as an attendant on scrofula, we can hardly see the grounds upon which such action is to be regarded even as an essential element of the disease. Dr. Glover ably discusses this question, but, after a careful perusal of his arguments, we are still inclined to question the *inflammatory origin* and *nature* of scrofula. When this remark is made, it is right to state, that we are perfectly aware of the fact, that both scrofulous disease and tubercle of the lungs do frequently arise as a consequence of inflammation, and that both are very generally accompanied by it, in one form or other, in their progress to maturity; this however, does not, in our estimation, in any measure warrant the conclusion, that either scrofula or tubercle is of necessity essentially inflammatory in its origin. In confirmatiou of his views on this question, Dr. Glover quotes Dr. Bennett's ideas on inflammation. We do not, however, consider the light thrown upon the subject, either by microscopic examination or chemical analysis, sufficiently powerful to overthrow all that has been so long received, and it may be said sanctioned, by careful physiological and pathological observers. As we have already said, chemical analysis and the minute structure developed by the microscope, make us acquainted with results, but the cause of these is not demonstrable, either by one or other of these agents. If confirmation of this be required, reference may be made to the analyses of both the blood and urine, as given in the work before us, from which it will be seen that literally nothing is proved at all peculiar either to scrofula or tubercle; the changes or deviations from the healthy state of these fluids, being met with in cases of disease, and conditions of the system, in nowise allied either to tubercle or scrofula.

Chapter VII is devoted to the "Etiology or Scrofula." In it the question of hereditary influence is fully and ably discussed by our author, who has given several cases in illustration of the subject, and which decidediy favour the generally-received opinions on this point. Dr. Glover has not contented himself with merely examining into the history of the parents, but has extended his inquiries to the collateral branches of their families. From these cases it appears, that even

where the parents were healthy, other members of the families suffered from either phthisis or scrofula. The subject in case No. 3, had an epileptic sister, this we notice, as in several instances which are vivid in our recollection, we have observed the occurrence of epilepsy and scrofula in the same families. How far these diseases really are associated or connected, may perhaps deserve attention. The same remark applies to hydrocephalus, which is mentioned as having occurred in the family of Case 5. The following remark will carry the assent of most practical men:—"But although the hereditary nature of scrofula be established sufficiently, questions remain with regard to the degree of influence in the causation of the disease, attributable to hereditary influence, and to what may be termed occasional causes, both pathological and external."

Of the occasional causes of the disease, Dr. Glover adopts the following division, and on each section makes many judicious observations, through which, however, space does not permit of our following him:—

"1st. Bad air and defective ventilation.

"2nd. Confinement and want of exercise.

"3rd. Imperfect nutriment and exposure to cold and wet.

"4th. Venereal errors.

"5th. The influence of other diseases, called by Lugol pathological causes.

"6th. The influence of climate, of age, and sex."

Chapter VIII treats of the localization, modifications, and complications of scrofula

The second part of the work is dedicated to the consideration of the treatment of the disease, and contains a very good digest of the various remedies now in use. In regard to mercury, Dr. Glover well observes,—"The total proscription of mercury is as unwarrantable as the exclusive use of iodine or cod-liver oil," in which remark we most perfectly concur. Of the mercurials, we also agree with the author, that the Hydrargyrum cum Creta is the best and safest preparation. His remarks on the various remedies are judicious, and display a thorough knowledge of both the physiological and chemical operation by which they are characterized, especially as regards the compounds of bromine and iodine. We have only space for a very brief notice of his remarks on cod-liver oil, of which he describes three varieties, for the description of which we must refer to pages 271-2. Dr. Glover used the second variety. He states that "the effects of cod-liver oil have been attributed to its iodine, and also to its bromine," and farther observes,—"When cod-liver oil is taken internally, no odour can be perceived in the secretions and excretions; and in Case 1, of the analyses of urine, we obtained it, or a quantity of oil, at least, from this fluid." Applied externally it appears to be absorbed through the skin, in illustration of which, Klencke's experiment on two dogs is cited, according to whom, the oil should not be given to plethoric people, or to very young children. For its therapeutic action, *vide* pages 243-4, wherein it is stated, that "the action of cod-liver oil is, in all probability, as a tonic, from the resinous principle which it contains, by stimulating animal heat, occasionally by acting as an aperient, and also as a deobstruent, more particularly by increasing the quantity of urine." Klencke supposes "its usefulness to be owing to its supplying the deficiency of the fatty principles of the bile, which, according to him, are not excreted in sufficient quantity in scrofula, but remain in the organ, constituting the fatty liver so often found in this disease."

The plates at the end of the work are well calculated to illustrate the changes to which they relate, and are exceedingly well executed. We must now conclude this notice of a most interesting work. In doing so, we congratulate the author on the manner in which he has performed his task, and cordially recommend it to our professional brethren.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

February 6th, 1847,

ALFRED BAKER, Esq., in the Chair.

OVARIAN TUMOUR: COLLOID DISEASE OF THE LIVER.

Dr. Fletcher exhibited a large right ovary, which weighed ten pounds, attached to the uterus, and a portion of the liver taken from the same subject, affected with colloid disease.

In the commencement of May, 1846, being in attendance upon a sister I was consulted by Miss S., a young lady, 23 years of age, who had slight general emaciation, and had increased uncomfortably in the bowels; the stomach seemed in a tolerably healthy state; the functions generally were performed well; the pulse was about 75, rather feeble; menstruation was regular, but deficient in quantity. She did not think the state of her health at all alarming and only complained of the size of her bowels. She was engaged to be married in a few months.

I requested to be allowed to make a more particular examination than her dress permitted. This was instantly acceded to, and I then found a tumour in the lower part of the abdomen, exactly in the median line, extending from the os pubis up to near the umbilicus, smooth and rounded in its form, and elastic to the touch, and fully representing a gravid uterus at between the fifth and sixth month of pregnancy. On examining per vaginam, the os and cervix of the uterus was found in a virgin state; the uterus was fixed and somewhat retroverted in its position, the os and cervix lying forward under the os pubis, and the fundus backwards, so that the inferior portion of the back of the uterus could be felt without difficulty, and on this portion a small tuberculous nipple-like projection was felt. From this examination it was evident that there was a tumour in

the abdomen, and the fixed state and position of the uterus, and the existence of a small body upon its posterior surface, lead somewhat to the conclusion that the tumour was attached to the uterus. The application of iodine externally and internally was the treatment employed, and attending to the general health.

About three weeks afterwards, the patient beginning to get thinner and increasing in size in the abdomen, by an examination, instead of one single tumour being found, it appeared to have split into several, which lay in two masses on either side of the median line,—that on the right extending up towards the liver, that on the left not quite so much external, but larger than the other. An examination per vaginam detected the uterus itself in the same state, but higher up in its natural position, and not fixed; it moved freely by pressure of the finger. It was now quite evident that the tumours were ovarian, and that the uterus was not greatly implicated in the disease.

The patient from this time got rapidly worse, emaciation and debility increased, and the tumours rapidly grew larger. That on the right side could be felt knotty and hard, and extended up to the right hypochondrium, so that in a month after the last examination described, when Mr. Hodgson kindly saw the case, it was impossible from examination, to say that the tumours were not connected with the liver. The tumour on the left side seemed to extend more laterally and not quite so high as that on the right, and was felt in hard lumps all over the left side of the abdomen. Anteriorly and below, between the lumpy projections, fluctuation could be detected; and in the upper part and in the lumbar regions the sound was tympanitic upon percussion. Mr. Hodgson recommended iodine to be *pushed* even more extensively than it had been, which was continued for some time.

The future state of the patient can only be described as getting worse and worse; emaciation went on without interruption; the tumours increased in size. At times there was difficulty in passing motions or urine; at times there were slight pains in different parts of the abdomen, more particularly in the right inguinal region, but these were never severe in their character, and readily gave way to fomentations and leeches, and after extreme emaciation, she died on the 29th of January, 1847.

Post-mortem examination, January 30th, twenty hours after death. The body in the utmost state of emaciation; abdomen hard and much enlarged, measured three feet six inches round over the navel, and one foot nine inches from the os pubis to the ensiform cartilage.

The head was not examined. The contents of the thorax were free from disease. The integuments of the abdomen were very much distended. On opening the abdomen, about a gallon of fluid escaped from the cavity of the peritoneum, of a brown colour, and turbid. On examining it, it slightly reddened litmus paper, was 1.020 in specific gravity, and very highly coagulable on boiling. The peritoneum was thicker than normal, and was covered by a thick semi-transparent gelatinous substance, which, on examination under the microscope, exhibited the characters of fibrin, which, most probably, in the process of coagulation, had separated from the fluid. The whole cavity of the abdomen was occupied by the ovaries, which had increased to an immense size; the right one (the one produced,) was rather longer than the left, but not more than half its bulk; it weighed ten pounds, and was composed of cells of different kinds; some were cysts, and contained fluid, (which of course escaped upon being punctured,) others contained a soft substance, having the yellow semi-transparent appearance of colloid matter, whilst other nodules were composed of a hard cartilaginous substance; the two latter, examined under the microscope, exhibited the nucleated cells of malignant disease. There was a small nodule of tubercle, which projected at the posterior part of the neck of the uterus. The liver exhibited nodules of colloid matter, which had the same appearance under the microscope as the portion taken from the ovary. The spleen and pancreas were healthy. The intestines were healthy, but contracted, with the exception of their peritoneal coat, which was rather thickened, and they were covered generally with coagulated fibrin. The kidneys were healthy, but the pelvis and upper portions of the ureters were distended.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES, PARIS.

February 22, 1847.

ÆTHER-INHALATION.

M. Flourens read a notice respecting the influence of æther on the medulla oblongata. He remarked that he had previously ascertained that in the spinal marrow sensation was abolished before motion, but that both might be destroyed without destroying the life of the animal. The explanation of this is sought in the following experiment:—

A dog being fully brought under the influence of æther, the medulla oblongata and spinalis were laid bare. Pricking the latter in both its anterior and posterior columns gave rise to no movement on the part of the animal. This point being clearly ascertained, the medulla oblongata was irritated, when the animal uttered a loud cry, and the muscles of the neck were seen to contract. The same phenomena were elicited in two similar experiments, from which M. Flourens draws the conclusion that the different portions of the nervous system are successively influenced by the æther, and that the medulla oblongata is the last in the series.

The same physiologist has made trial of other æthers, as the chloric and nitric, the former of which exhibited an action precisely similar to the sulphuric. In three experiments with the latter the animal was destroyed (?) in the space of two minutes.

[The French word *succomber* is generally employed with the signification of death, but possibly the experimenter here uses it to express insensibility; we do not believe that death would be produced in the short period mentioned, as we have inhaled pure nitric

æther, certainly not without a remarkable feeling of thoracic inconvenience, not experienced from the use of sulphuric æther, but without any symptoms which would lead us to expect such rapidly fatal effects. Transl.]

The inhalation of alcohol did not produce any insensibility, but only intoxication. M. Flourens sums up as follows:—1. The action of the æther upon the nervous centres is successive and progressive. 2. The cerebral lobes are first influenced; next the cerebellum, then the spinal marrow, and last of all, the medulla oblongata.

M. Laugier related several additional operations under æther, and stated that he had particularly remarked, that the colour of the arterial blood was not altered, as has been represented.

M. Gerdy observed that he did not consider it necessary to produce entire insensibility, as he had found patients bear operations without manifestation of pain, in whom the ætherization had only produced slight stupefaction.

M. Landouzy related his experiments to determine the combustibility of expired æther, from which it appears that all fear of explosion may be discarded.

M. Ducros suggested that the effects of æther may be immediately dissipated by galvanism.

REAL AND APPARENT DEATH.

M. Mandl made known a means of distinguishing real from apparent death, which consists in noting the effects of a burn upon the integuments. The results obtained by M. Mandl are the following:—

1. A burn of the second degree produces vesication in the living subject.

2. This does not take place in the dead body.

3. The author does not venture to state that vesication takes place in all individuals, and in every form of disease.

M. Serres, in connection with the above communication lamented that there was no certain sign of death, a point of much consequence in many cases, as for instance, where the propriety of the Cæsarean operation becomes a question, and he in consequence proposed a commission to enquire into the merit of the proposed test.

March 8th.

M. Flourens read a second memoir upon the physiological action of æther, in which he exhibited its close affinity to asphyxia.

M. Roux related a case of tetanus, in which he considered that the fatal event was decidedly hastened by the inhalation of æther.

ANALYSIS OF THE BLOOD AFTER INHALATION OF ÆTHER.

M. Lassaigne communicated the results of an examination of the venous blood of an animal before and after inhalation. The following is a summary of his observations:—

1. The blood taken before and after inhalation did not differ sensibly in colour, nor as to coagulation; that taken after inhaling exhaled a strong odour of æther.

2. The serum and clot in the two specimens of blood differed as below:—

Before inhaling	Clot	65.46
	Serum	34.54
		100.00
After ditto	Clot	59.69
	Serum	40.31

3. After inhaling, the serum acquires a slight reddish tinge.

4. The clot appears less consistent before than after inhaling.

5. The globules, fibrin, and the albumen, preserve the same proportions after as before inhalation.

6. The quantity of æther absorbed by the blood is inappreciable in the small quantity of blood submitted to examination. We have, however, endeavoured to ascertain this quantity by studying comparatively under the same thermometric and barometric conditions the tension of the serum before and after inhalation, comparing the result with the tension of a solution of æther of a known strength. By this means we believe that we are authorized in estimating the quantity of æther absorbed, as 0.0008 of the quantity of the venous blood.

INFLUENCE OF ÆTHER ON THE CIRCULATION.

M. Amussat repeated his conviction that the physiological effect of æther was a veritable asphyxia; he also stated that the blood is rendered more fluid and less coagulable. The latter circumstance he regarded as important in reference to secondary hæmorrhage.

ÆTHER AS A MEANS OF DETECTING FEIGNED DISEASES.

A novel application of this agent has been suggested by M. Baudens,—namely, that of detecting malingering. Two cases are related, one of feigned spinal curvature, the other presumed feigned anchylosis of the hip, both in soldiers. In the first case the dorsal deformity totally disappeared during the æthereal insensibility; in the other the immobility of the joint remained, and was thereby proved to be real.

CHEMICAL COMPOSITION OF OSTEO-SARCOMA.

M. Roux, desirous of ascertaining the composition of this form of tumour, analysed a specimen removed from the humerus. It was found to consist of the following ingredients:—

Water	87.86
Chondrine	0.85
Albumen	0.30
Margarine, stearine	0.28
Carbonate of lime	0.67
Phosphate of lime	0.59
Sulphates of soda and potass	0.28
Carbonate of soda	0.14

Sulphate of magnesia, silica, &c.,—a trace.

SIGNS OF APPARENT DEATH.

M. Levy claimed the priority of discovery of vesication after burning as a test of real and apparent death.

M. Bouchut related some experiments entirely

subversive of the credibility of this test, having succeeded in raising a perfect vesication in four corpses.

[The reader may recollect some experiments on the same subject by M. Champonillon, (*Prov. Journal*, Jan. 27, 1847.,) which are strictly in accordance with those related by M. Bouchut.]

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE.

February 23, 1847.

The claims of Mr. Wells to priority in the application of æther-inhalation having been discussed, the meeting proceeded to the consideration of the employment of the extract of nux vomica in chorea, which formed the subject of a memoir, by M. Trousseau, and was reported upon by M. Gaultier de Claubry.

ÆTHER-INHALATION IN OBSTETRICAL PRACTICE.

M. Dubois observed, that although what he had to bring before the meeting was to a certain extent connected with the subject of previous discussions, he yet considered that he should adduce much that was new and important. M. Velpeau and M. Bouvier had been the first to express the surmise that the stupefying effects of æther might be made available, in removing the pains attendant upon parturition, but the speaker was the first [in France. *Transl.*,] to put the practice to the test. His objects in his experimentations were to assure himself in the first place, that the æther was inoffensive to the mother and child, and also to learn the action would not extend itself to the muscles of the uterus, and so destroy its contractility. In illustration of his investigations, he narrated the following cases:—

A female, aged 18, primiparous, exhibited no sensation of pain while the forceps was applied. In a second and similar case, the same insensibility was observed.

In reply to the question whether æther has the power of abolishing the contractility of the uterus, and the abdominal muscles, he related the subjoined cases:—

A female who had been in labour with her first child for two hours, was the subject of regular and severe pains. Inhalation produced certain unpleasant phenomena, such as determination to the head, injection of the eyes, stertorous breathing, &c., but, nevertheless, the contractions of the womb were not affected, and took place without the slightest consciousness on the part of the patient. During the insensibility, the pulsations of the fœtal heart were distinctly perceptible, but appeared to diminish in frequency as the insensibility of the mother became more profound.

In another female, who cried out loudly under the severity of her pains, æther produced complete insensibility in three minutes; during this period the uterine contractions continued with their usual vigour, but gave rise to no expression of pain on the part of the patient. In this state the child was expelled, and on recovering her senses, the patient declared that she had been perfectly unconscious of suffering.

The conclusions stated by M. Dubois, as arising out of his experiments, are,—that æther has the power of subduing pain in obstetrical operations; that it suspends the natural pains of labour in a most marked manner; but, on the other hand, that it does not suspend either the contractions of the womb, or of the abdominal muscles. In answer to the question put by some of the members, M. Dubois further stated that he had not observed that any ill effect was produced upon the child by the inhalation.

March 2nd.

ON CATHETERISM IN STRICTURES OF THE ŒSOPHAGUS.

This was the title of a memoir by M. Trousseau, having for its object the recommendation of graduated probangs in the treatment of constriction of the œsophagus. In the discussion which ensued, M. Gerdy remarked that there was nothing novel in the treatment, and related a case in which he had succeeded in restoring the calibre of the passage, after it had been so far reduced as to admit an urethral sound with difficulty. M. Cloquet observed that great discrimination was necessary as to the nature of the obstruction, in cases in which this mode of treatment was proposed. It was spoken of by Velpeau as of great value in spasmodic and simple inflammatory strictures.

March 9th.

ÆTHER-INHALATION DURING LABOUR.

M. Bouvier related the following case:—A female, aged 26, entered the Hospital Beaujon, having been in labour for five or six hours. The uterine contractions were rapid; the os uteri dilated to three centimeters; the membranes projecting; and the cervix obliterated, firm, and resisting. The pains being extremely violent, the patient inhaled æther. At the expiration of eight minutes she became insensible, and from *that moment the uterine contractions ceased*, but recommenced on her recovery. As M. Bouvier observed, this case is directly opposed in its result to those of Dubois and Simpson, both of whom mention that the uterine pains are not influenced by the agent.

In remarking on this case, M. Roux enquired whether the intermission of the pains was not accidental, and unconnected with the inhalation, and alluded to the naturally intermittent character of the uterine contractions.

March 16th.

After the reading of a commission of inquiry on several different methods of embalming, M. Dubois presented a specimen of

SPONTANEOUS AMPUTATION IN THE FŒTUS

The infant had been born two days. The middle and ring finger of the left hand had lost the upper phalanx, as had also two toes on each foot. The extremity both of the fingers and toes exhibited a sort of wound still bloody, thus attesting the recent removal of the parts. In addition to these accidents, the left leg presented a deep circular depression similar to that produced by a ligature. The same appearance in a greater degree existed also in the right leg. At the time of birth the amputated parts did not shew any traces of irritation, but have since become inflamed. The umbilical cord was not more than half its usual length, but the placenta was normal. M. Dubois proposed to make some observations on this case at a future meeting.

THE NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY.

On Tuesday, the 13th instant, a conversazione of the members of the National Institute of Medicine, Surgery, and Midwifery, was held at the Hanover Square Rooms, which was attended by a numerous assemblage of both metropolitan and provincial members.

For the gratification of the gentlemen present on the occasion, the Council had invited collections of subjects of great curiosity, interest, and value, which were displayed on tables down the middle of the great room. Among these were instruments for the inhalation of æther and of oxygen; admirable models of pathological subjects, after the invention of Dr. Thibert; a great many specimens of articles of the Materia Medica, remarkable for purity and superiority of quality and character; and there was a collection of engravings and curious objects of *virtu*, referring to the archæology of medicine, the property of G. J. Squibb, Esq., this collection, comprising the largest number of engraved portraits of eminent medical men of all ages and countries which is known to exist.

Mr. Ward, of Wellclose Square, exhibited many natural curiosities, and also one of his close cases for the culture of plants, and kindly gave a short history of his discovery of this most agreeable and useful adjunct to the cultivation and preservation of plants, in an atmosphere so unfavourable as that of the metropolis, and also as respects great diversities of temperature.

Mr. Ward, after citing the elegant hypothetical description of the physical peculiarities of climate in paradise, from the writings of Guernerus Rolfincius, a professor at Jena, 1669, (*"Nulla ibi immodica ventorum vis, nulla tempestatum procella, nullus horror, non torrens æstatis ardor, non molesta et noxia antermin siccitas; sid temperata et pacifica omnium temporum cieter se consonantia,"*) stated that, supposing the description to be probable, it was not unreasonable to conclude, that the atmosphere and climate of his case might be nearly those of paradise itself.

Following up the analogy, Mr. Ward did not doubt that apartments for human habitation might be similarly adapted for the occupation of invalids suffering from pulmonary and cutaneous diseases, mentioning the instance of a lady who, having been ordered to a warmer climate, from circumstances being unable as well as unwilling to leave home, rooms were adapted for her use on this principle, in which, after living for one or two years, she was perfectly restored to health.

In the course of the evening Mr. Pennington, the venerable and highly-respected President of the Institute, delivered the following address:—

"Gentlemen,—After difficulties innumerable, we have at length arrived at a period in the history of the National Institute which I trust will be an evidence of two things:—1st; That as a class we are determined to sustain our position, and to assert with becoming dignity our right to be considered one of the scientific bodies of the kingdom, and an essential part of the medical profession:—2nd; That as general practitioners, hitherto in possesion of no means of social communion, we are resolved to furnish them for ourselves, and no longer to be solely dependent upon the courtesy of other bodies.

"I have been sixty years a member of the College of Surgeons. I believe that I am the oldest member of that body, and I fearlessly assert that no man has had better opportunities of judging than I have respecting all that is connected with our profession, and of the various relations of that profession to the public. My intercourse with every order of medical practitioners during this long series of years, and my enjoyment, I may fairly say, of a very considerable share of the public confidence, has afforded me means more extensive than has fallen to the lot of any other individual, not only of judging what the medical requirements of the community are, but also of the capabilities of every description of medical practitioner.

"You are all aware, gentlemen, that during the whole of my life I have practised as a general practitioner. Cullen, William Hunter, Jenner, and Abercrombie, were general practitioners, and we have a right to feel proud of the memory of such names. Throughout the lengthened period to which I have referred, I have had the most complete demonstration, that the confidence reposed by the public in the competency and skill of the general practitioner has been well merited, and that the principles upon which the general practitioner stands are those of truth and justice; and my connection with the National Association and the National Institute has assured me, that this confidence not only continues, but is on the increase, and that I and others who must soon pass from the scene, will be followed by gentlemen who will equally enjoy it, and who in the progressive advancement of practical medical and surgical science, will fully sustain the character and the honour of their class.

"Identified as I have been with this class—impressed with the most thorough conviction that the welfare of the community depends upon its prosperity—observing its progressive advancement in knowledge and respectability—it has for many years been a source of deep regret to me, that so large and intelligent a body, embracing as it does so much sterling worth, should be deprived of the advantages which would result to themselves, to science, and to the public, from their association into an effective and permanent body; by which association only, can they take their stand as one of the recognized Medical Institutions of the country.

"My energies have ever been directed to the attainment of this object. I took an active part during the agitation of the years 1812, 1813, 1814, and 1815. With this object in view, I hailed with satisfaction the attainment of the Act of 1815. Defective as it was, the Act gave to the general practitioner the power of educating himself up to the standard which his important functions demanded. From that time to the present, and totally apart from any bill introduced by any minister, I have never failed to advocate THE INCORPORATION OF THE GENERAL PRACTITIONERS,

and the retaining this power in their own hands, and extending and perpetuating this important privilege. It was the contemplated abrogation of this privilege, and the tendency to lower the social and professional position of the general practitioner, and thereby to inflict a serious injury upon my fellow-creatures, in the change recently adopted by the College of Surgeons, and in the medical legislation recently attempted, which induced me, at my advanced period of life, again to take an active part in asserting the claims to consideration of the class to which I belong.

"Personally I have no interest in the matter. My comfort and convenience would have been better consulted by ease and retirement—taking no part whatever in political agitation. Still, I by no means regret the part I *have* taken, and I here again declare my unflinching determination to do all that lies in my power, by every means that can be suggested, and to the latest day of my life, to accomplish the object which we have so much at heart, an object which, in my mind, involves the security and happiness of the whole community. At the same time I should not be doing you justice if I hesitated to express my deep regret and great disappointment, at the apathy, distrust, and lukewarm spirit, with which the profession has regarded objects so highly important both to themselves and the community; and that out of a body numbering perhaps 12 or 15,000 individuals, only 4000 have as yet been found public spirited enough to enrol their names as opponents of a scheme of legislation based upon the most erroneous principles, while a still smaller number have come forward to co-operate actively to promote a just and beneficial measure of MEDICAL REFORM.

"Notwithstanding all this, I live in hope of better things. The National Institute will try and carry through its plans in the face of every discouragement or difficulty which may present itself. It is contemplated immediately to take a house, as a permanent abode. The representative council will be annually renewed,—we shall hold our general, our scientific, and our social meetings,—we have already commenced a collection of books, and a large and valuable library will be doubtless formed with great rapidity,—a museum will be the next object of our solicitude; and I trust, that before long, we shall be enabled to give *substantial* encouragement to the members of the Institute for contributions to science. A great object of the present meeting has been to bring together the PROVINCIAL and the METROPOLITAN MEMBERS, that they may have the opportunity of communing freely with each other upon all these subjects, and upon any and every other subject which may bear upon their political and social welfare, and for the especial purpose of promoting the greatest desideratum of all—a mutual good understanding.

"I have not deemed it right, gentlemen, to occupy your time upon the present occasion by any lengthy address; but I was anxious to avail myself of the opportunity, to make my own views and my own determination well understood, and for that purpose I have had these few observations printed, that any gentlemen who desire it may have copies for themselves, or for those friends who are not present, and that no misapprehension may arise from any imperfection in my delivery. I will conclude by stating, that upon this first occasion the Council has laboured under great disadvantages, owing to our not having rooms of our own; but for the purpose of shewing what the nature of our social meetings will be, they have hastily collected together a few objects of interest. I hope every one present will pass the evening agreeably, and to the advantage of the cause in which we are engaged, and I trust that we shall separate with a renewed determination to employ our utmost zeal and energy to promote the successful issue of the cause."

The conclusion of this address was followed by the unanimous expression of warm applause, and a resolution of thanks was carried by acclamation.

The usual refreshments were at hand in the adjoining room. All appeared to enjoy the utmost satisfaction in the proceedings of the evening, and separated with an assured confidence in the expectation of the pleasure of similar re-unions at future times, with improved and enlarged appliances, and means of social and intellectual enjoyment.

CHARGE OF UNLAWFULLY PRACTISING AS AN APOTHECARY: CONVICTION.

An important trial on a charge of unlawfully practising as an apothecary took place at the Bolton Quarter Sessions before the Recorder in the early part of last month. The offender, Ellis Flitcroft, appears to have been somewhat changeable, as he originally commenced the active business of life as a brick-setter, then became a policeman, then returned to his original occupation, ultimately taking up with the trade of agent and assistant to an American herbalist, and occasionally it seems doing a little business on his own acconnt, so far at least as to bring him within the limits of the Apothecaries' Act.

The following is the evidence brought forward on the part of the prosecution, as reported in the *Bolton Chronicle*, and on which a conviction took place:—

Lettice, wife of Thomas Bartley, stated: On the 7th of December last, my son, Robert, was ill. I know Ellis Flitcroft; I went to him on Tuesday morning, the 8th of December, at his own house. I told him that my child was poorly. He asked me how it was; I said it was very red in its cheeks. He said his child would have been in its grave but for some stuff he called Coffin's medicine. He said if the child was red in its cheeks it must be the scarlet fever. I told him my mother had three children poorly. He sold me 1½d. worth of raspberry leaves; he said I must get one pennyworth of penny royal, mix them together, and pour boiling water upon them. He came the same day to my mother's house, where the child was. He brought a powder with him. He called for boiling water, but he mixed the powder up in some cold water, and gave it to the child as well as he could. He said it was to make it "sweat." My mother gave the other to her child. He gave me a bottle of stuff; it was not so "terrible" strong; it was dark-coloured. He said it was intended to make it sick. I gave it to the child until half-

past seven at night; it became sick, but could not vomit. He came at the dinner time and put a bottle of water to its feet and one to its back, after he had given it the powder. After eight o'clock the same night I went to his house. I got something from his wife. He came the next day, between two and three o'clock. He did not bring any stuff with him. I gave the child the stuff I got from his wife, and when he came he told me to give it it every hour. The child grew worse. I went to his house on the Friday. He gave me some more to make it vomit. My father gave Mr. Denham the stuff that was in the bottle, which was produced at the inquest. On the Friday the defendant charged me 1s. 9d. for the stuff. My child died on the day following, Saturday.

Alice Grundy, the mother of the last witness, deposed: I saw the powder which the defendant brought to my house. I had three children ill of scarlet fever. The defendant looked at them, and said that, if we did not take care, one of them would go off in a decline. He said he would engage them for half-a-crown each, but I did not approve of it. There was some of the powder left; he said it would do it no harm, and I gave it the child, who cried and said "Mother its burning my throat." She was red in the face before, but she went more red. I afterwards went to the Dispensary, and my children are all well.

Cross-examined: The defendant is known in Bolton as the agent of Dr. Coffin, a herb doctor.

Susannah Greenhalgh said: My husband (George Greenhalgh,) was aged 25 years. He died on the 16th of January. He gave up work on the 7th January (Thursday,) on account of being poorly. The day after he brought home a bottle of stuff. He took a portion of it every three hours. He thought it did him good at first; he thought so till Tuesday. He was bedfast on Wednesday morning. He then sent me for Flitcroft. He (Flitcroft,) came and saw him in bed. He ordered hot water to his feet, and a vinegar cloth. He desired me to go to his house for some medicine, which was to sweat him, "pick" him, and purge him. I went to his house and received two powders; one of them was green, and the other buff. He charged me 4d. for them. He said I must take nearly a teaspoonful of the green powder, and mix it with warm water and sugar in a cup. He said it was to sweat him. I was to put two teaspoonfuls of the orange powder into a gill and a noggin of warm water, in a pint jug. I was to give him not quite a teacupful every twenty minutes. I gave it him together till he would not have it any more. He got worse, and died on the Saturday. Margaret Rogerson gave some of the powders to Finnigan, the police officer.

Cross-examined. For a day or two at first my husband thought he was better from the medicine. He went out two or three times. Flitcroft told him he was unfit for work. He went to his work on the following Tuesday, and could only work three-quarters of a day. He was worse on Tuesday night. Flitcroft said he had got cold.

Margaret Rogerson deposed: I saw Greenhalgh in bed on the Thursday before he died; he appeared to be in great pain; he complained of being thirsty, and called for water, by quarts at once. I remained with him during the night. I gave the powders to Finnigan, the police-officer.

Ann Leach: I was about two months since afflicted with the rheumatism. I sent for Flitcroft, and he sent me some medicine,—a powder and a bottle. I took a little of the powder, which felt very warm; and afterwards I took the whole powder. I only took one glass of the bottle. I asked the price of the bottle and powder. He said I must never mind it, there was something between my master and him. He owed him something for ale.

Cross-examined. I got better of my rheumatism, but not before I applied to Mr. Chadwick; I think he set me up. I am in the habit of passing Flitcroft's place. He has a sign over his door, which says,—"Ellis Flitcroft, vender of herbs from America; licensed to sell tea and coffee." I have heard them say he was acting under Dr. Coffin's prescription.

Martin Finnigan: I am acquainted with Flitcroft. I first knew him when he joined the police-force, five or six years ago. I know him to be a brick-setter. I received from Margaret Rogerson some powders, which I delivered to Mr. Taylor, the coroner. I have been in Flitcroft's place; I saw a quantity of bottles, of all sizes.

Cross-examined: I was instructed by Mr. Taylor to inquire into this matter, in consequence of two inquisitions. I am the coroner's officer. I collected the whole of the evidence for the inquisitions, except that of Mrs. Leach. I never endeavoured to get up a case. I appeared before the Magistrates to apply for a warrant in this case.

Thomas Mewburn: I apprehended defendant on the 28th of January on this charge. I read over the warrant to him; he said he had no certificate—he did not require any, and that he was not an apothecary, as he dealt in nothing but herbs and plants.

J. Taylor, Esq., solicitor: I am coroner of the borough. In the course of my official duties two powders were given to me by Finnigan. Those are the same that have been submitted to Mr. Denham.

Joseph Denham, Esq., deposed. I am a surgeon and apothecary in this town. By direction of the coroner, I made a *post-mortem* examination of the body of the child Robert Bartley, who had died of inflammation of the lungs. It was a medical case. I have examined the powders produced. The green one is Lobelia, sometimes vulgarly called "Indian tobacco." It is one of the medicines in the Materia Medica. It operates as an emetic; in large doses as a purgative. In very large doses it acts as a powerful narcotic poison. I should say it is likely to be injurious when it does not produce vomiting. The other powder, the buff one, consists of cayenne pepper and spices. It is a stimulant, and would produce a warming effect. In my opinion it would be injurious to a person labouring under inflammation, and improper for a child of the age of Robert Bartley under any circumstances. It is in the Materia Medica. I should say it would produce great thirst; that is its natural effect.

Cross-examined: Cayenne pepper acts as a stimulant. The smallest dose, say a grain, or half a grain, would produce an increase in the circulating powers of a child. It might be a proper medicine to administer in cases of great debility. The other powder is known as Lobelia inflata. To the best of my recollection it was not in the Pharmacopœia of 1819; but capsicum, which is also

called cayenne pepper, was. Lobelia is a vegetable production. It is a description of tobacco. I believe it grows in America. Druggists are in the habit of selling cayenne pepper lozenges, and many kinds of medicinal preparations. Cayenne pepper may be had from grocers, as well as cinnamon. I am not aware that Lobelia is sold by druggists or grocers.

Re-examined: A great number of medicines are vegetable preparations. Rhubarb, opium, and prussic acid are such. Druggists sell medicines when parties come to ask for them, but it is no part of their business to go out and prescribe medicines.

The case was opened by Mr. Brandt and defended by Mr. Sowler, whose arguments went rather to show that the venders of quack medicines in general rendered themselves liable to the penalties of the Apothecaries' Act, than that his client had escaped the infringement of it. A witness was called for the defence, from whom, however, nothing material was elicited, and Mr. Brandt having replied, the Recorder summed up at some length, giving it as his opinion, that the acts named in the evidence, said to have been done by the defendant, were practising as an apothecary, and the Jury, after consulting together for some time returned a verdict of guilty. The defendant was then ordered into custody and sentenced to one month's imprisonment.

MR. CRONIN'S CASE.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Without examining the *very unusual "prescription"* produced at the inquiry into this case, for the purpose of showing how far it is compatible in a chemical point of view, and without arguing how far the "Art of Prescribing" is therein studied, taking the composition as a whole, surely there can be no objection in showing what the different articles so much doubted or questioned are.

I give the prescription as copied from the *Times* newspaper, and of course as a copy I am not responsible for its being a correct transcript of Mr. Cronin's latinity, nor for any other errors or omissions which may be found in it:—

"R. Spt. Ammon. Aromat.	dr. ij.
Tinct. Opii	gtt. xvj.
Acidi Prussici, viz., (Scheele's strength,)	gtt. iv.
Pulv. Strych. Comp.	gr. ij.
Aquæ Amygd. Amar.	oz. vj.

M. Fiat Mist. e qua *sumatur* coch ij. ter die.

"Feb. 3, 1847, Miss Collier,

"D. C."

The subjoined formulæ have been given for the Aqua Amygdalarum Amarum:—

"Aqua Amygdalarum Amarum."

"Mix 2 lbs. of fresh cake of bitter almonds (from which the oil has been expressed,) with enough water to form a thin pap. In twenty-four hours distill ¼ lb. by means of steam, conducted to the bottom of the still by a tube connected with a boiler. Filter the distilled water through wet paper."—*Paris Codex.*

M. Hænle proposes to mix half a drachm of essential oil of bitter almonds and ten drachms of diluted hydrocyanic acid (Pharm. Lond.) with twelve ounces of distilled water. The mixture to be well shaken and then filtered.

The dose of either form is given as from ten to forty drops.

Another substitute is the "Emulsio Amygdalæ cum Amygdalina," of Wöhler; and this is made by forming one ounce of emulsion with two drachms of sweet almonds, and dissolving in it seventeen grains of amygdaline. The formula for amygdaline is as follows:—Boil well pressed cake of bitter almonds twice in strong alcohol; strain through linen, and press the residue; remove any oil that may appear; heat the liquid again, and filter. In a few days, part of the amygdaline crystallizes. Concentrate the residuary liquor to a sixth part, and add æther, which will throw down the amygdaline. Press it between blotting paper; wash it with æther; re-dissolve in boiling alcohol, and set aside to crystallize.

According to the evidence given at the inquest, it appears that they (at Cronin's,) made their own "bitter almond water," and that it was in the proportion of six minims of essential oil of bitter almonds to a quart of water.

From *Gray's Supplement* we find that the formula for "Aqua Amygdal. Amar.," is bitter almond-cake, bruised, ¼ lb. draw off five gallons; and a second form is given under the name of "Aqua Amygdal. Amar. Concentrata." But upon this I hold we should not dwell, nor should any comparison be drawn, as it may savor of unfairness; for the "prescription" certainly does not contain the word "concentrata," although it is quite certain that the patient died by taking a like preparation.

The Aqua Amygdalarum Amarum., according to Cronin's nostrum, as known to himself was perfectly harmless; but how uncertain or indefinite to every one else what he really intended to be given, or the dose he meant to be taken.

As regards the other unaccepted article, the receipt of Brera runs thus:—

"Pulvis Strychniæ Compositus.

R. Strychniæ	gr. j.
Oxyd. Ferri Nigri	dr. ij.
Sacchari	dr. iij.

Misce et divide in partes sex."

The evidence given at the inquest farther informs us, that to make the "Compound Strychnine Powder," according to the defendant's mode, was, that he put two grains of strychnine to half an ounce of sugar. Now in this no mention is made of the black oxide of iron, which is found in Brera's formula; and moreover, the proportionate quantity of strychnine is much greater. This is adduced to shew the vagueness of what was ordered, although it must be admitted that the small quantity of two grains of the private form of the Pulvis Strychniæ Compositus, in a six ounce mixture, could not contribute to the sad event, if it had formed part of the compound.

A MEMBER.

February 17, 1847.

General Retrospect.

ANATOMY AND PHYSIOLOGY.

ON THE NERVES OF THE TONGUE.

An important memoir on this subject, by MM. Biffi and Morganti, contains the following conclusions:—

1. The glosso-pharyngeal nerve, independent of its special sensibility, possesess an exquisite sense of touch, as was demonstrated by experiment on dogs and horses.

2. The pharyngeal branch of the glosso-pharyngeal is not constant in its manifestations, sometimes it possesses an exquisite sensibility, at others it is quite insensible.

3. The glosso-pharyngeal does not possess motor powers.

Müller maintains that the nerve exhibits motor functions after it has merged from the cranium. To verify this assertion, the authors have repeatedly performed the following experiment:—Having sawed the cranium of a living animal into lateral halves, so as to expose also the pharynx and tongue (!!), they removed the brain and cerebellum, and isolated the medulla oblongata and the fasciculus of nerves which emerge by the posterior foramen lacerum. The glosso-pharyngeal is then pinched, upon which it is found that no movement takes place in the pharynx or tongue; but on the other hand, that vivid contractions are induced by irritating the accessory nerve of Willis.

The movements which have been witnessed by Longet, Guizot, and Mayo, upon irritating the nerve, the author believes to be excito-motory, as the same may be excited by irritating the cerebral extremity of the nerve after its division.

4. The glosso-pharyngeal is the nerve of taste for the velum and pillars of the palate and the posterior two-thirds of the tongue.

5. The anastomotic branch of Jacobson is neither motor nor gustative, but possesses acute tactile sensibility.

6. The pharyngeal branches of the pneumo-gastric are not gustative, but are mixed motor and sensitive nerves.

7. The lingual branches of the fifth pair, besides other specific sensibility, possess the sense of touch, but to a less degree than the other branches of the fifth.

8. The lingual branches of the fifth pair have no motor function, but may be the incident nerves of a reflex movement.

9. The anterior third of the tongue receives its sense of taste solely from these nerves.

10. The corda tympani is sensitive but not motor; it exercises some influence over the intensity of the sense of taste.

11. The hypo-glossal nerve has no specific sensibility, but is the chief motor-nerve of the tongue.

Such are the results of the authors' experiments, many of which, our readers need not be told, are at variance with those of other physiologists, more particularly those connected with the corda tympani, a nerve which, in the opinion of Bernard, (*Gazette Méd.*, 1845,) is thought to possess motor powers as well as to be instrumental to taste. The authors at least appear to have exercised care in their observations, and took the very necessary precautions after exposing a nerve, to suffer the animal to recover from the immediate effects of the operation, previous to resorting to farther experiment.—*Gazette Méd.*, Mars 6, 1847.

PATHOLOGY.

BUFFY COAT OF THE BLOOD.

In a memoir on the signification of the buffy coat and on the production of the blood corpuscles, Remak concludes with the following practical remarks:—

1. In order to arrive at a certain appreciation of the diagnostic and prognostic value of the buffy coat, it is requisite that the blood, in all cases of venesection, should be collected in high and narrow vessels. It frequently happens that when broad vessels are used, and the coagulation proceeds irregularly, no buffy coat is formed; when, if collected in another manner, it would have undoubtedly appeared—a fact which though generally known, is very little attended to. Since attention has been paid in Schönlein's "Clinique" to the mode of collecting the blood, and its coagulation has been carefully watched, a buffy coat has been observed in every case.

2. The microscopic examination of the buffy coat in relation to the quantity of colourless blood-cells, may be made highly useful in determining its importance, as indicative of the stage of inflammation. The absence of many colourless blood-cells in the buffy coat, affords a much more certain indication of an unusually large amount of fibrin arising from inflammation, than does the presence of a great number, the latter condition being generally dependent upon the regeneration of blood after repeated venesections, and probably connected with an imperfect metamorphosis of the cellular elements of the blood in dyscrasic diseases, such as typhus, glanders, scurvy, and cancer. —*British and Foreign Medical Review*, April, 1847, p. 507.

ANALYSIS OF LYMPH.

The analysis of lymph by M. Laugier, given below, differs somewhat from those previously given. The specimen experimented upon contained—

Water	983.7
Fibrin	0.4
Albumen	6.2
Extractive matter	2.7
Fixed salts	7.0
Fats, &c.	traces
	1000.0

The chief difference between this and other analysis consists in the small amount of fibrin, which varies usually from 1.2 to 5.2.—*Ibidem.*

ON THE FIBRIN OF THE BLOOD.

In a long memoir, Zimmerman engages in numerous enquiries connected with the chemical composition of the blood, the principal results of which are embodied in the following propositions:—

1. The fibrin of venous blood is soluble in a solution of nitre. The solution always takes place irrespective of the quantity of the salt, or of the water, or of the degree of temperature.

2. We are not as yet sufficiently acquainted with the solubility of the fibrin of human arterial blood, but it is less soluble than that of venous blood. The fibrin of both the venous and the arterial blood of the ox is nearly insoluble; that of the dog is very soluble. In the horse the arterial fibrin is more soluble than the venous.

3. Heat favours, and cold retards the solution of coagulated fibrin.

4. Dissolved fibrin resembles albumen, as being coagulable by æther.

5. Fibrin is rendered insoluble by boiling water.

6. The fibrin of exudations is as soluble as that of venous blood.

7. The inflammatory crust of the blood is very sparingly soluble.

8. Putrefaction favours the solubility of fibrin.

9. Compression of fibrin renders it more insoluble.—*Archiv. für Physiologische Heilkunde.*

MICROSCOPICAL OBSERVATIONS ON ICTHYOSIS.

By M. Nicolucci.

The following observations were made upon a woman, aged 70, who had laboured under icthyosis of the leg for five years. The scales which detached themselves, seen with the naked eye, appeared to resemble shagreen; viewed on their adherent aspect, they appeared to be areolar; viewed in their perpendicular aspect, they appeared to consist of small columns, one extremity of which rested on the skin, the other forming the superficies of the eruption.

Under the microscope the same columns were noticed, but it was farther noticed that they were tubular, and were united by some intermediate substance. The investing membrane appeared destitute both of cells and fibres. In the interior of the tubes were seen cells of 1-60th to 1-100th of a line in diameter, with nuclei of 1-240th of a line; each nucleus contained a nucleolus. Of these cells, some were oblong, others many-sided; each contained from one to five nuclei.

The intertubular substance was composed of cellules of 1-100th to 1-150th of a line in diameter, with nuclei, but no nucleoli. This substance, as well as the tubes, became transparent under acetic acid.

These investigations throw some light on the pathology of icthyosis. Most authors state that in this disease the epidermis alone is implicated, but the preceding results appear to show that the new production of icthyosis has a greater affinity to certain horny growths. For this reason M. Nicolucci suggests that the disease should be called *Keratosis*, from *Keras*, a horn.—*Gazette Médicale*, Mars 6, 1847.

SURGERY.

SUBMUCOUS SECTION OF THE SPHINCTER ANI IN VARIOUS SURGICAL DISEASES.

[This simple operation has been successfully performed by Blandin, Guerin, Velpeau, and Demarquay, in spasmodic stricture of the sphincter ani, permanent contraction of the muscles, fissure of the anus, &c. The latter author has published a long paper upon the subject, a translation of which appears in Dr. Ranking's "Half Yearly Abstract," from which we quote the following extract.]

"*Description of the Operation.*—The rectum must be previously evacuated; the patient placed as for the operation of Boyer. An assistant raises the buttock of the side opposite to that in which the section is to be made; this is always done on one of the sides of the anus, in order to cut the sphincter in its middle; an ordinary tenotome, or a particular bistoury proposed by M. Blandin, may be employed. The first is inconvenient from not being long enough, nor sufficiently guarded, and it may cut or tear the mucous membrane, the perforation of which might be the cause of serious accidents.

"M. Blandin's instrument is a bistoury, with a strong handle, and a moveable plate on one of the faces of the blade; the plate is rounded at its extremities, a little longer than the blade, and when closed it covers it completely. There are marks on the handle which indicate the direction of the edge. The operation is performed with this instrument alone. When it is required only to puncture the skin, a small part of the blade is uncovered; when the bistoury is to pass between the muscle and the mucous membrane, the blade is hid by the moveable plate, and the instrument acts as a smooth and slightly flattened stilet. When it is required to cut, the plate is drawn into the handle, and the instrument is used as an ordinary bistoury.

"The operation is simple; it is necessary—1. To make a small opening in the skin. 2. To introduce the finger into the rectum at the same time that the skin of both sides of the anus is made tense. 3. To pass the tenotome or bistoury between the mucous membrane and the sphincter. 4. To divide the latter.

"The puncture of the skin is generally made two or three centimeters from the anus. The instrument should pass gently, in order to detach the parts as little as possible. This is the most delicate part of the operation, especially as the instrument passes the level of the sphincter. In one case, to avoid the difficulty, M. Velpeau cut from below upwards, but this practice is attended with inconveniences. At the moment when the division is made, a kind of snap may be heard, and immediately after the operation a space is distinctly felt between the divided parts of the muscle.

"After the operation the cutaneous incision is dressed with cerate, or cold-water compress, and in a few days the cure is complete. The patient should be kept in bed, and defæcation prevented for several days. Hæmorrhage or inflammation occasionally supervene, but have never been found to prevent a favourable result. Occasionally, as in one of the instances quoted, the operation is required on both sides."

TURPENTINE COLLYRIA.

M. Laugier has lately made use of this application in several cases at the Hôpital Beaujon. His experiments were made upon cases of conjunctivitis, both acute and chronic ptosis, dacryosistis or inflammation of the lachrymal sac, and also sclerotitis, all of which had been (we will not say correctly,) already treated with a collyrium of nitrate of silver, and consequently appeared to the author to be the most appropriate for judging of the comparative effects of the two remedies. The formula which he gives is as follows:—To twenty

grains of Venice turpentine, heated in an earthenware mortar, add, when sufficiently fluid, twenty drops of the essence of turpentine, and triturate: three or four drops of this to be dropped between the eyelids night and morning. Its action was most beneficial, and seemed preferable to that of the nitrate of silver, employed in the strength of fifteen centigrammes in thirty grammes of distilled water. M. Laugièr afterwards tried it with a number of externe patients attending the hospital, and affected with acute disease of the conjunctiva and cornea, who had not been submitted to any previous treatment, and their cures were sufficiently numerous and rapid to testify to its harmlessness and efficacy. The proposer of this remedy suggests the propriety of employing the turpentine in the form of an ointment, by mixing it with some fatty substance. He has used the pure oil of turpentine; it however, increased the pain exceeedingly; he therefore recommends its administration in the formula already given.—*Dublin Quarterly Journal*, 1847.

TREATMENT OF ENLARGED SUBCUTANEOUS BURSÆ.

When matter is formed in these bursæ, the only means is the evacuation of the fluid by a free opening; this is unattended with danger, and followed by a rapid and complete cure. When, however, the bursal affection is recent, the skin thin, and the fluid probably a mere increase of the natural secretion of the cavity, the employment of blisters, or the external application of the tincture of iodine, is the best means of lessening the swelling; but it will probably return. For a complete cure, or in those cases where the swelling does not yield to the application of blisters, or to the external application of iodine, more especially if the swelling be not large, the best plan of treatment is to introduce a fine thread through the swelling, and use it as a seton. On the second day this generally causes considerable pain and requires withdrawal. A small quantity of puriform fluid passes for a few days through the opening, after which the swelling gets gradually less, and contracting is completely cured. Very frequently the bursa suppurates so freely as to require a free opening, the hole for the thread having closed. Although this is an extra source of pain, yet the cure is more complete, and quite compensates for this accident. Removal of bursæ simply for their inconvenience is a serious matter.—*Ormerod's Clinical Observations*, p. 90.

HÆMORRHAGE FROM LEECH BITES.

In order to arrest the hæmorrhage from leech bites M. Morand advises the application of a mixture of six parts of olive oil, and two of yellow wax; this is to be spread in a thin layer over the bleeding orifices, previously wiped dry.—*Brit. and For. Rev.*, April 1847.

CHEMISTRY.

NEW TEST FOR PRUSSIC ACID.

By Professor Liebig.

When some sulphuret of ammonium and caustic ammonia are added to a concentrated aqueous solution of prussic acid, and the mixture heated with the addition of pure flowers of sulphur, the prussic acid is converted in a few minutes into sulphocyanide of ammonium. This metamorphosis depends on the circumstance, that the higher sulphurets of ammonium are instantly deprived by the cyanide of ammonium of the excess of sulphur they contain above the monosulphuret; for instance, if a mixture of prussic acid and ammonia be added to the pentasulphuret of ammonium, the solution of which is of a deep yellow colour, and the whole gently heated, the sulphuret of ammonium is soon decolorized; and when the clear colourless liquid is evaporated, and the admixture of sulphuret of ammonium expelled, a white saline mass is obtained, which dissolves entirely in alcohol. The solution yields, on cooling or evaporation, colourless crystals of pure sulphocyanide of ammonium. Only a small quantity of sulphuret of ammonium is requisite to convert, in the presence of an excess of sulphur, unlimited quantities of cyanide of ammonium into sulphocyanide; because the sulphuret of ammonium, when reduced to the state of monosulphuret, constantly re-acquires its power of dissolving sulphur and transferring it to the cyanide of ammonium. The following proportions will be found to be advantageous:—Two ounces of solution of caustic ammonia of 0.95 specific gravity, are saturated with sulphuretted hydrogen gas; the hydrosulphate of ammonia thus obtained is mixed with six ounces of the same solution of ammonia, and to this mixture two ounces of flowers of sulphur are added; and then the product resulting from the distillation of six ounces prussiate of potash, three ounces of the hydrate of sulphuric acid, and eighteen ounces water. This mixture is digested in the water-bath until the sulphur is seen to be no longer altered and the liquid has assumed a yellow colour; it is then heated to boiling, and kept at this temperature until the sulphuret of ammonium has been expelled and the liquid has again become colourless. The deposited, or excess of, sulphur, is now removed by filtration, and the liquid evaporated to crystallization. In this way from $3\frac{1}{3}$ to $3\frac{1}{2}$ ounces of dazzling white dry sulphocyanide of ammonium are obtained, which may be employed as a re-agent, and for the same purposes as the sulphocyanide of potassium. Of the two ounces of sulphur added, half an ounce is left undissolved.

The behaviour of the higher sulphurets of ammonium towards prussic acid furnishes an admirable test for this acid. A couple of drops of a prussic acid, which has been diluted with so much water that it no longer gives any certain re-action with salts of iron by the formation of prussian blue, when mixed with a drop of sulphuret of ammonium and heated upon a watch-glass until the mixture is become colourless, yields a liquid containing sulphocyanide of ammonium, which produces with persalts of iron, a very deep blood-red colour, and with persalts of copper, in the presence of sulphurous acid, a perceptible white precipitate of sulphocyanide of copper.—*Liebig's Annalen*, Jan., 1847. —*Chemical Gazette*, April 1, 1847.

MODE OF REMOVING THE STAINS OF NITRATE OF SILVER FROM LINEN.

Mr. Herapath states that these stains consist of finely divided metallic silver, in intimate union with the tissue of the cloth. They are immediately removed by

the following plan:—The spotted linen is to be strained over a basin of hot water, and a few drops of tincture of iodine are to be dropped on each spot, previously moistened with water. Upon them is then to be poured sufficient of a solution of the hyposulphite of soda to dissolve the iodide of silver thus produced, and the tissue is immediately to be washed in warm water. The tincture of the pharmacopœia, and a solution of one drachm of the hyposulphite of soda, in two ounces of water, are the preparations recommended.

Taking into consideration the immense destruction of linen which is caused by the use of lunar caustic injections, the above suggestion is extremely valuable. —*Pharmaceutical Journal*, April 1, 1847.

TOTAL ABSTINENCE AND MEDICAL TESTIMONY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

My attention has been called to this important subject, by the letter of your correspondent θ, in the last number of our greatly improved Journal; and for the instruction of your readers, and the worthy gentleman's inspection, I beg leave to annex the articles of declaration to which he refers, and which he characterizes as containing "assertions unproved, and consequently, rash and dangerous."

"We, the undersigned, are of opinion—

"I. That a very large portion of human misery, including poverty, disease, and crime, is induced by the use of alcoholic or fermented liquors, as beverages.

"II. That the most perfect health is compatible with total abstinence from all such intoxicating beverages, whether in the form of ardent spirits, or as wine, beer, ale, porter, cider, &c.

"III. That persons accustomed to such drinks, may, with perfect safety, discontinue them entirely, either at once, or gradually after a short time.

"IV. That total and universal abstinence from alcoholic liquors, and intoxicating beverages of all sorts, would greatly contribute to the health, the prosperity, the morality, and the happiness of the human race.

"JOHN BOSTOCK, M.D., F.R.S., F.L.S.

"RICHARD BRIGHT, M.D., F.R.S., Physician to the Queen.

"Sir B. C. BRODIE, Bart., F.R.S., Sergeant-Surgeon to her Majesty.

"Sir W. BURNET, K.C.H., M.D., F.R.S., Physician General to the Navy.

"W. F. CHAMBERS, M.D., F.R.S., Physician to the Queen and Queen Dowager.

"Sir JAMES CLARK, M.D., F.R.S., Physician in Ordinary to her Majesty."

Now it is but fair to ask your correspondent, which of the four very plain statements he finds so rash and dangerous? He talks of no consideration being given to the evidence on which "such propositions, regarded as scientific truths, may be supposed to rest;" again, that an easy good nature, *hardly* excusable, has caused the signature of many to be given, &c. Now, really Mr. Editor, these comments are not in very good taste, considering the high character, in science and morals, of the men who have appended their signatures; neither does it greatly indicate the philosophical acumen of this defender of drinking usages.

The quotation from Liebig* goes for nothing; indeed that illustrious chemist distinctly states that beer and spirits are *not* elements of nutrition, but merely elements of respiration. With regard to the opinion of Mitscherlich, that alcohol is formed in our system from the sugar of our ordinary food, I should like to know what the supposed quantity may be per diem? and even supposing the fact proved, which it never has been, the analogy is bad, and no more proves the benefit of these stimuli as daily drinks, than the physiological fact of free muriatic acid being formed in the stomach during digestion, would argue the importance of our drinking daily this corrosive poison.

But, lest θ should be supposed to be an advocate of intemperance, he winds up his arguments by a *qualified* condemnation of the evils connected with these habits, at the same time solemnly cautioning his medical friends to pause!! "ere they bring their characters as men of science into question, by assertions which are not borne out by well ascertained facts in physiology and chemistry."

Really there is something of the ludicrous in a nameless member of our Provincial Association, from his concealed retreat, uttering oracular cautions to such men as Bostock, Bright, Brodie, and others, and the absurdity of which, I think on mature reflection, he must acknowledge.

The subject altogether is most important, and did I not fear occupying too much space in your valuable columns, I could show θ from the most undeniable evidence, that the generally-received opinions about the *nutritive* qualities of stimulating beverages are *quite worthless*; and also, that in very many cases, the only chance of breaking through the mischievous habit of drinking, is by total abstinence.

I admit that temperance, in a well regulated mind, may be all that is necessary; but alas! for one man or woman who can stop at the right point, there are hundreds to whom the cup is truly Circean, and its draught a physical or moral poison.

Excuse the length of my yarn, for I have a great horror of long letters,

And believe me,

Yours respectfully,

EDWARD HUMPAGE.

Bristol, April 23, 1847.

* See "Familiar Letters on Chemistry," No. X.

THE PROVINCIAL MEDICAL DIRECTORY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

A very sensible letter appears in your journal of March 24th, signed "Candidus," in reference to the "Provincial Medical Directory," publishing the names and residences of persons as medical practitioners, leaving us to guess the grounds of qualification to any such title they may possess. I, for one, consider it the duty

of the proprietors of that Directory, not only *to omit* all names sent to them, devoid of title through the *modesty* of their applicants, but also to *ascertain* that those, to whose names titles are affixed, do really possess such. This of course would entail on the proprietors of the Directory, the trouble of examining the printed lists of the various licensing bodies; but it would at the same time enhance the value of the Directory, which is otherwise a record devoid of utility, and an encouragement to quackery and imposition. I think I could select a name or two, for which their owners (as men of letters,) can make no higher claim than appending to their patronymics now in that Directory, the letters M.S.O.F., that is to say, Member of the Society of Odd-Fellows. The Directory ought to be a true book of reference of qualification, or cease to be at all.

I am, Sir, yours, &c. &c.,

Honiton, Devon. M.S.O.F.

Medical Intelligence.

MEDICAL REGISTRATION BILL.

On Tuesday, April 20th, Mr. Wakley obtained leave to introduce a Bill "For the Registration of Qualifed Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland." The Bill bas been printed, and is ordered to be read a second time, on Wednesday, May 5th.

"Probably this is the last Parliamentary effort that will be made in the present generation to obtain an Act for the Registration of Qualified Medical Practitioners, and for amending the present anomalous condition of medical law. If an immense majority of the medical practitioners of Great Britain and Ireland unite their exertions in support of the Bill, they will obtain a law which will confer both upon them and the public inestimable advantages. If the profession be indifferent, Parliament will be indifferent, and the Bill must be lost."—*Lancet*, April 24th.

THE JACKSONIAN PRIZE.

At the late meeting of the Council of the Royal College of Surgeons, the prizes founded by the late Samuel Jackson, Esq., were awarded to Mr. Thomas Callaway, jun., of London, for his Dissertation on Luxations and Fractures of the Clavicle, Scapula and Scapular End of the Humerus, and Treatment; and to Mr. Edward Hulme, of Exeter, for his Dissertation on Asphyxia, its various Causes, Forms, and Treatment.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, April 16th, 1847:—P. A. La Fargue; W. Yonge; F. Moore; S. Wilks; H. R. Rump; T. Webb; J. E. Ellerton; E. Adams; W. D, Michell; D. Hughes; C. Munday.

Admitted Members on Wednesday, April 21st:—H. B. Gibbon; A. Ferguson; J. V. Hughes; J. Harwood; J. S. Pearse. W. S. Shipton; W. M. Fairbrother; R. D. Harris; J. E. Gannon; W. H. Sproston; J. L. Cotter; G. Fry; J. T. Campion.

Admitted Members on Friday, April the 23rd:—G. F. Jones; T. J. T. Williams; W. D. Eddowes; J. W. Hubbard; J. L. Worship; T. Armstrong; A. R. H. Podmore; A S. Willcox; J. Ferguson; W. H. Baylis.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, April 15th, 1847:—Frederick Freeman Allen, Market Harborough; William Palmer, Rugeley; William George Harvey, Penzance; William Mott; William Ellis Hambly, Kingsend, near Plymouth; Abraham Jubb, junior, Halifax; William Price, Wrexham; Edward Haycock, London; William Alexander Bryden, Wadhurst.

Admitted Thursday, April 22nd:—Morgan Thomas, Vale of Neath, Glamorganshire; Henry Turner, Sherborne, Dorset; Hubert Shelley, Epsom; Charles Thompson, Salisbury; Peter Eade, Blofield, Norfolk; George Hother, Lewes; George Browne, Reading.

OBITUARY.

Died, March 8th, at Vienna, the Ritter von Raimann, Chief Physician to the Emperor of Austria.

April 2nd, in Gracechurch Street, London, Richard Casson, Esq., Surgeon, late of Hull, where, about twenty years ago, in conjunction with the late Dr. Alderson, he established the East Riding Lunatic Asylum.

13th, in Harley Street, William Maclure, Esq., Surgeon, aged 56.

19th, in Finsbury Circus, Thomas Bevan, M.D., aged 43.

24th, in Upper Stamford Street, aged 73, Forbes Macbean Chevers, Esq., a retired Surgeon of the R. N.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

Gentlemen who have not yet paid their subscriptions for the current year, or who are in arrears, are requested to forward the amount due, either to the Secretary of the district in which they reside, or to the Treasurer or Secretary of the Association.

ROBERT J. N. STREETEN, Secretary.

TO CORRESPONDENTS.

Communication have been received from Dr. Chambers; D. W. Davies; D. C. R. Hall; Mr. F. Buckell; Dr. Cullen.

The Harrogate Inquest-case is in type, but unavoidably postponed till next number.

PROVINCIAL
MEDICAL & SURGICAL JOURNAL.

REPORT OF CASES OF STRANGULATED HERNIA, WITH OBSERVATIONS.

By Clement Hawkins, Esq.,
Surgeon to the Cheltenham Dispensary, and Female Orphan Asylum, Cheltenham.

With the concurrence of my friends, Messrs. Fowler, Eves, and Fricker, I am induced to publish the following cases and observations on strangulated hernia. Twelve of the fourteen cases occurred in the hospital practice of the two former gentlemen, and one each in the practice of Mr. Fricker and the late Mr. Whitmore. Although not a principal, through the kindness of the above named friends, I had the opportunity of witnessing and in many cases assisting in the treatment. The constitution of the Cheltenham General Hospital and Dispensary is such as to preclude the surgeons of the Dispensary department from performing capital operations. The rules of the Institution demand that all such cases shall be admitted into the house under the care of the surgeon of the week. These appointments are ably filled by Messrs. Fowler and Eves, who are the Surgeons to the Hospital. There are three Surgeons to the Dispensary who have nothing to do with the Hospital, the appointments in the Hospital are filled up from those of the Dispensary according to seniority.

Table of Cases.

No.	*Name of Operator.*	*Age.*	*Sex.*	*Species of Hernia.*	*Duration of Strangulation.*	*Results.*
1	Mr. Fowler	25	Male.	Inguinal	6 hours	Cured
2	Mr. Eves	25	ditto	ditto	10 hours	ditto
3	Ditto	19	ditto	ditto	8 hours	ditto
4	Mr. Fowler	25	ditto	Femoral	4 days	ditto
5	Ditto	63	Female	ditto	36 hours	ditto
6	Mr. Eves	46	Male.	ditto	24 hours	Died of hæmorrhage
7	Mr. Fowler	50	Female	ditto	4 days	Died
8	Mr. Eves	22	Male	Inguinal	6 hours	Cured
9	Mr. Fowler	45	ditto	Large scrotal	ditto	Died
10	Ditto	65	Female	Femoral	2 days	Cured
11	Ditto	33	Male	Inguinal (scrotal)	24 hours	ditto
12	Mr. Fricker, (private)	57	ditto	ditto ditto	4 days	ditto
13	Mr. Fowler	85	Female	Femoral	2 days	ditto
14	Mr. Whitmore	26	Male	Inguinal	3 days	ditto

Case I.

INGUINAL HERNIA, STRANGULATED; OPERATION; PERITONITIS: RECOVERY.

George Bleck, aged 25, a baker's servant, admitted into the Cheltenham Hospital, January 16th, 1839, with a strangulated scrotal hernia on the right side. He gave us the following history of his case:—Has had a hernia for more than three years, which has always been reducible, and he has worn a truss. Six months since he broke it, and he neglected to replace it. The rupture has often descended into the scrotum, but never to the extent it has done this day. About ten o'clock this morning, while he was lifting a heavy weight, the hernial protusion descended with great pain, and he could not return it. A druggist in the town saw him, and ordered him to go to the hospital. I saw him soon after his admission, at half-past twelve, a.m.; he was in excruciating agony, and was with difficulty retained in bed; he had a large tumour in the right groin, extending into the scrotum, very tense and painful, especially at the situation of the external abdominal ring, pain in the abdomen, constant vomiting, and constipation of the bowels. So tense was the tumour, that I was persuaded in my own mind that all efforts at reduction by the taxis would prove ineffectual. The warm bath was used, and the taxis employed by myself and Mr. Fowler to no purpose.

3. p.m. The operation was performed by Mr. Fowler. The sac being reached, it was carefully opened, but there was no fluid; a large quantity of small intestine with the mesentery was exposed; several glands in the latter were enlarged, and one was the size of a pigeon's egg; the intestine was exceedingly dark. The stricture was divided by Mr. B. Cooper's sheathed knife, and the contents of the sac were returned with considerable difficulty; the wound being united by sutures and plaster, he was sent to bed, apparently little relieved by the operation, and the following mixture ordered:—

Magnes. Sulph., dr. ss., ex Aq. Menth. Pip. oz. iss., quartis horis.

9, p.m. Is in great pain, lying on his back with his legs drawn up; countenance pale and anxious; pulse 90, small and hard; vomiting continues; thirsty; very restless; has passed a considerable quantity of fluid blood, unmixed with fæces, per anum; the bowels have not been opened since the 15th. We gave him a small quantity of gruel, with a few drops of brandy in it; he had also an enema of warm water, which returned without bringing away anything but blood. Ol. Ricini, oz. j., which made him sick.

Jan. 17th. Has had a tolerable night, but no stool; has passed more blood; pulse quick and full; tongue white; abdomen very painful; tendency to sickness. Hirudines 50 abdomini; haust aperiens.

4, p.m. Somewhat relieved. To have an enema of castor oil and turpentine, which produced no effect. Calomel, gr. iii; Opii, gr. ¾; tertiis horis.

10, p.m. Says he is easier, and disposed to sleep; pulse 100.

18th. Has had a quiet night; slept at intervals; has hiccough; bowels slightly moved; abdomen painful and tympanitic.

19th. Much better; a purgative draught produced several copious stools. A remission of all the symptoms followed.

20th. Has had a disturbed night, owing to the supervention of a diarrhœa, probably occasioned by the calomel and opium; has taken fifteen pills. Mist. Cretæ Comp. cum Liq. Opii Sedativo.

21st. Going on favourably; from this time he made a good recovery, the wound healed kindly, and he was discharged.

Case II.

INGUINAL HERNIA; STRANGULATION; OPERATION: RECOVERY.

Thomas Stoyle, aged 25, was admitted, Sept. 6th, 1839, under the care of Mr. Eves, with a strangulated hernia of the right side, which descended into the scrotum. He presented himself at the out-patients' room, and asked for a dose of medicine; the person who saw him very prudently examined him, thinking there was more anxiety of countenance than usual. A hernia was detected. He gave a most confused history of his case; he had never worn a truss. The symptoms present were,—tumour in the right groin, the size of a duck's egg, tense and painful; pain in the epigastric region; nausea; countenance pale and anxious; says he had a stool yesterday; pulse 100, very full; says the hernia only came down this morning. He was placed in the bath, and the taxis used, without effect. He was subsequently bled to 25 ounces from the arm, which induced syncope. Three hours after his admission Mr. Eves was sent for, who proposed an operation, which was not consented to. Ice was applied.

At 11 o'clock, p.m., eleven hours after his admission, as the symptoms were most distressing, vomiting almost constant, pain over the abdomen increased, pulse 120, he requested to have the operation performed, which was rendered very difficult by the cowardice of the patient. The sac was opened and contained no fluid, its contents were omentum and small intestine; the stricture which was situated high up the canal was very tight; the contents of the sac were returned with difficulty, owing to the resistance of the patient; the wound was united by sutures and plaster, with a compress and bandage. He expressed himself greatly relieved by the operation.

September 7th. Had a good night, and complains of little pain. As the bowels were not opened, he was ordered to take Ol. Ricini, oz. ss., quartis horis.

8th. He took two doses of castor oil without producing any effect.

Magnes. Sulph., dr. j., ex Aq. Menth. Sativ., oz., j., quartis horis.

9th. Bowels well acted on.

From this time he went on favourably, and was discharged October 1st.

Case III.

INGUINAL HERNIA, STRANGULATION; OPERATION: RECOVERY.

Henry Parker, aged 19, a mason, admitted February 22nd, 1840, under the care of Mr. Eves, at 9 o'clock,

p.m., with a strangulated scrotal hernia on the left side. He says he has had a rupture as long as he can remember, but has never worn a truss; it often descended into the scrotum, but he always has been able to return it in the recumbent position. After his day's work the rupture descended, and was harder than usual, and being unable to return it, he applied for admission into the hospital.

We found a tumour, the size of a large lemon, tense and painful; the testicle could not be felt; there was an evident constriction at the external ring; sickness; countenance very anxious; pulse full and hard; bowels opened this morning.

He was placed in the bath, and bled to sixteen ounces from the arm. The taxis produced no effect on it. Mr. Eves proposed the operation, which was consented to, and performed eight hours after the strangulation. The parts were very vascular, and the sac unusually thick; the sac contained a small quantity of fluid, small intestine, and a portion of mesentery; the stricture was at the inner ring, and was divided on the finger; considerable difficulty was experienced in reducing the intestine, owing to the quantity protruded. It was greatly congested. The wound was united as in former cases.

Feb. 23rd. Had a good night, and is free from pain; tongue white; pulse 94; bowels not opened. Mist. Magnes. Sulph.

24th. Had a good night, and is free from pain; pulse 90; tongue white; no evacuation from the bowels. To have an enema, which produced the desired effect.

25th. From this time he progressed favourably; the wound was a long time healing by granulation. A few weeks after this man was re-admitted, and the cicatrix had a sloughy unhealthy aspect, which would not heal. He was sent into the country, and did not again present himself. The hernia was radically cured.

Case IV.

FEMORAL HERNIA, STRANGULATION; OPERATION: RECOVERY.

Henry Trapp, aged 25, a coalheaver, admitted April 8th, 1840, under Mr. Fowler's care, with a tumour immediately below Poupart's ligament on the right side. He had been visited by two surgeons previously to his admission, who recommended him to go to the hospital, which he at first objected to, but afterwards consented.

2, p.m. I saw him, and found a tumour about the size of a partridge's egg in the right groin, circumscribed, moveable, and rather tender. The history was unusually obscure, he says he has had a swelling "off and on" for two years, which enlarged when he caught cold, but never disappeared altogether. Four days since it became larger, and he had great pain in his bowels, and sickness, which subsided after taking medicine. The bowels were opened on the 4th; vomiting has increased the last thirty-six hours. In about an hour after his admission he was visited by Mr. Fowler, who expressed some doubt in common with others as to the nature of the case. His countenance was free from anxiety; tenderness of the abdomen very slight; the impulse given on coughing was very trifling. It was agreed to watch the case, and he was ordered Ol. Ricini, oz. iss., cum Tinct. Opii, m. xv.

8, p.m. Mr. Fowler was sent for. The symptoms of strangulated hernia were well marked; pain in the abdomen severe; vomiting of green fluid; and hiccough. Under these circumstances it was deemed advisable to cut down on the tumour; an incision was made parallel with Poupart's ligament, and the dissection cautiously proceeded with, when the true nature of the case was discovered, (femoral hernia.) A small quantity of fluid escaped when the sac was opened; its contents were dark-coloured intestine. The stricture was divided on a director, and the intestine easily returned. The operation did not last more than five minutes.

9th. Had a tolerable night; bowels opened twice spontaneously; doing well.

10th to 24th. His recovery progressed without any interruption; he is only detained in the hospital till the cicatrix is sufficiently sound to bear the pressure of a truss.

Case V.

FEMORAL HERNIA; STRANGULATION; OPERATION: RECOVERY.

Ann Toby, aged 63, admitted April 24th, 1841, with a femoral hernia in a strangulated state on the right side. She is a healthy woman, and has had a large family. About sixteen years since, she perceived a tumour in her groin the size of a pigeon's egg, but took no notice of it, as it always diminished when she was in bed. Yesterday morning when using exertion, it descended, and became larger than usual; this was followed by griping pain and sickness; she took castor oil and salts, but vomited both. She applied to a medical man, who sent her immediately to the hospital.

On her admission, we found her in the following condition:—Pulse tranquil; countenance free from anxiety; bowels soft; little pain on pressure. The tumour was of a large size in the usual situation of a femoral hernia, soft; bowels confined; no sickness since the morning. Attempts were made to reduce the rupture in vain. As there seemed to be no urgent reason for operating immediately, a dose of calomel and opium and an aperient draught were ordered.

April 25th. She has passed a bad night, and has had feculent vomiting; after some persuasion, she consented to have the operation performed. The contents of the sac were intestine and omentum; the former was returned and the latter allowed to remain, as it was adherent. The operation was quickly performed, and the patient expressed herself much relieved; in six hours after it, she commenced taking the Magnes. Sulph. ex Aq. Menth. Piperitæ.

April 26. Had a good night, took two doses of the mixture, which operated freely.

June 7. She was discharged cured, with a truss.

Case VI.

FEMORAL HERNIA; STRANGULATION; OPERATION: DEATH.

Thomas Maisey, aged 46, a labourer, of spare habit, admitted May 3rd, 1840, under the care of Mr. Eves, with a femoral hernia on the right side. He says he has had a rupture six months, but has never worn a

truss; it descended, and became larger than ever the day previous to his admission; he had pain in the bowels, and was sick. The bowels were opened a few hours before the strangulation of the rupture. He was visited by a surgeon in the country this morning, who bled him largely, and endeavoured to reduce the hernia, but in vain. He sent him into the hospital at 10 p.m.

The usual symptoms of strangulated femoral hernia were present, but were not urgent, which perhaps in some degree may be accounted for by the combined effects of the treatment and the fatigue of the journey. The warm bath was used, and the taxis employed, without success.

Half past 11, p.m. It was decided that the operation should be performed. It proved to be a difficult one. On prosecuting the dissection a quantity of altered glandular structure was found between the fascia propria and the sac, resembling omentum. On clearing this away, and carefully dissecting, the sac was opened, and a small quantity of dark fluid escaped; the swelling sensibly diminished. A small portion of dark intestine was seen just protruding through the femoral ring; the stricture on it was so tight that neither the finger-nail nor director could be pushed beneath it, and the intestine was so extremely resistant from distention by air and fluid, that great caution was required to prevent its rupture. The hernia-knife was gently pushed onwards, its blunt point entered beneath, the stricture was divided, and the knuckle of intestine spontaneously retired. Previously to the performance of the operation he told us "*when he was cut he always bled freely.*" In three hours after the operation considerable hæmorrhage took place from the wound; the house-surgeon applied a compress and bandage to arrest it.

May 4th. I visited the patient with Mr. Eves this morning; a large quantity of blood had been lost; the bed was saturated, and it had run through it on to the floor beneath; the compress and bandage were removed; the wound filled with thin pale blood; no vessel could be discovered. We effectually arrested the hæmorrhage by including a considerable quantity of cellular substance in a ligature; the pulse was 70, and steady; has had no sickness nor pain since the operation.

In the evening the belly became tender; countenance flushed; tongue white. The following day intense peritonitis set in, accompanied by great exhaustion; calomel and opium were used with small quantities of brandy, and he died May 6th.

I was not present at the *post-mortem* examination. Mr. Eves informed me, that although there were appearances of peritonitis all over the cavity of the abdomen, it was not so severe as might have been expected. The bowels generally were dark-coloured and congested, but the portion strangulated was thickened, and the calibre diminished. The circulation was not re-established in it.

Case VII.

FEMORAL HERNIA; STRANGULATION; OPERATION: DEATH.

Mary Turner, aged 50, married, the mother of several children, was admitted a patient of the Dispensary January 2nd, 1841. I visited her immediately, and found her labouring under symptoms of strangulated hernia; the tumour was situated in the left groin. It appeared she first felt pain in her bowels, and vomiting, Dec. 31st, and sent for a person in the neighbourhood, who administered injections. When I saw her at half-past two, p.m., I ordered her into the hospital, as the symptoms were very urgent. The countenance was anxious, and of a leaden hue; vomiting feculent; pulse small and thready; the tumour was small, about the size of a pigeon's egg. I immediately after visiting her, called on Mr. Fowler, and requested his immediate attendance.

5, p.m., Mr. Fowler operated. The sac being opened, a portion of intestine of a very dark colour was seen; the stricture was divided, and by a little gentle manipulation the bowel was readily returned. A large quantity of greenish fluid escaped from the abdomen; the operation afforded no relief; the acute suffering remained unabated until death terminated her existence, twenty-four hours after the operation. The treatment consisted in the use of calomel, and opium, and leeching.

Post-mortem examination. The body was emaciated, and the abdomen swelled; on opening it the cavity presented marks of intense peritoneal inflammation, and contained about two pints of fluid, of a greenish brown colour; the peritoneum was highly injected; the intestines generally inflamed, and congested; the portion which was strangulated was situated at the junction of the great and small intestines, and the impression made by the stricture was visible; the coats of the bowels were softened, and easily separated.

Case VIII.

INGUINAL HERNIA; STRANGULATION; OPERATION: RECOVERY.

Isaac Neale, aged 22, a smith, admitted into the Cheltenham Hospital, under the care of Mr. Eves, August 15, 1842, with an inguinal hernia of the right side. He states that he has had a rupture as long as he can remember, but has never worn a truss. At seven o'clock, p.m., it came down, during the time he was at work, and was very hard and painful. When admitted he had acute symptoms; vomiting; anxiety and paleness of countenance; pain over the abdomen. The tumour was irregular in shape, tense and painful, and descended into the scrotum. He was bled to sixteen ounces, and put in the warm bath, and the taxis gently used, at one, p.m., both by Mr. Eves and Mr. Fowler, but without effect. Previously to the performance of the operation, by Mr. Eves, Mr. Fowler enquired of the patient if both testicles were in the scrotum, which question was not satisfactorily answered. Nothing particular occurred in the progress of the operation till the sac was reached, which was very thin, and contained no fluid; its contents were omentum and gut, the former lying anteriorily to the latter; the stricture, which was high up, being divided, after a little manipulation, the protruded parts were returned. The testicle was exposed, and had escaped through the ring, but had not descended farther than just through its mouth; it was rather smaller than

usual. The wound was dressed in the usual way, and the man expressed himself greatly relieved by the operation. His bowels had not been moved since the 14th. Liq. Opii. Sed., m. xv.

16th. Doing well; pulse 80. Mist. Magnes. Sulph., quartis horis.

17th. No stool; pulse 94, and sharp, [illegible] of pain in the wound and over the region of the heart, which is increased by inspiration; there has been a great discharge of serum from the abdomen.

18th. Bowels freely opened yesterday evening and again this morning; wound nearly healed. I made particular inquiry respecting the descent of the testicle; he told me "it never had been down like the other."

23rd. From this time he rapidly recovered, and was discharged cured.

Case IX.

LARGE SCROTAL HERNIA; STRANGULATION; OPERATION: DEATH.

John Hughes, aged 45, a milk carrier, was admitted January 9th, 1845, under Mr. Fowler's care. He has been accustomed to lift heavy weights; about a year since he observed a swelling in the right groin, which descended into his scrotum; it was about the size of an egg, and returned into the belly when he was lying down. He has never worn a truss. This evening, about seven o'clock, it suddenly descended, and was far larger than ever it has been before; he was immediately siezed with violent dragging pain about the navel, sickness, &c. He applied to a medical man, who gave him something to make him vomit. On his admission we found a tumour about one foot in length, and, I should think, measuring at least twenty inches in circumference, exceedingly tense and painful, especially at the external ring; the greatest pain was about the navel; his countenance was particularly anxious; pulse small and feeble; the surface of the body was cold. The house-surgeon, Mr. Hartley, agreed with me that any attempt at reduction by the taxis in this case would be replete with danger. He sent to Mr. Fowler immediately, who on his arrival, at one p.m., said, "Surely this cannot be all intestine and omentum," but on carefully examining it, was unable to detect any transparency. Mr. Fowler made gentle attempts to reduce the hernia, but was convinced with us that any great pressure from without would expose the man to imminent danger of bursting the bowel. The operation was immediately performed. Having exposed the sac, Mr. Fowler endeavoured to divide the stricture without opening it, but failed. On opening it, the contents were found to be a large quantity of small intestine and mesentery, but no fluid. The stricture, which was scarcely in reach of the finger, was divided, but the greatest difficulty was experienced in reducing the bowel, which in quantity would fill a hat; it was enormously distended by air; at length this difficulty was surmounted, and the wound united by four sutures. He expressed himself much relieved. Calomel, gr. iij; Opii., gr. iss.

Jan. 10th. Looks well; pulse 84; has been sick once.

11th. No evacuation from the bowels; looks depressed, resembling the appearance of a man who has had a severe accident; tongue loaded; pulse small, 90. Took a dose of castor oil, which made him vomit a large quantity of greenish fluid; an enema brought away a large quantity of fæces.

8 p.m. Belly sore; pulse 120; eyes depressed; there is a re-protrusion of the parts; he has all the symptoms coming on. He was largely bled from the peritonitis pentine fomentations were used; calomel and opium freely exhibited.

12th. All the symptoms became aggravated, and he died this afternoon.

Post-mortem examination twenty-four hours after death. The abdomen only was examined. The small intestines were glued together by recently-effused lymph; that portion which was protruded had not recovered from the pressure of the stricture; the mesentery was congested, and several ecchymoses were observed on it; there was much air, but little fluid, in the peritoneal sac and intestines.

Case X.

FEMORAL HERNIA; STRANGULATION; OPERATION: RECOVERY.

Ann Toby, aged 65, admitted October 18th, 1845, under Mr. Fowler's care, with a femoral hernia of the left side, in a state of strangulation. She has had a double femoral hernia for many years, and was operated on by Mr. Fowler, April, 1845. (*Vide* Case V.) She has worn a single truss since that period.

On the 16th while coughing violently the tumour on the left side descended, and was painful, the pain extending all over the abdomen. On her admission we found a tumour on the left side, of an irregular shape, evidently a femoral hernia. Countenance was anxious; pulse 88; sickness and obstinate constipation. No effect was produced by the use of the taxis.

Mr. Fowler operated about two hours after her admission. The sac contained no fluid nor intestine, only omentum, which was very red. Gimbernat's ligament was freely divided, and a portion of omentum returned, the greater part being allowed to remain in the sac. Liq. Opii, m. xxv.

October 19th. Going on well; bowels opened without any medicine.

November 16th. She has recovered without a bad symptom, and had a double truss applied.*

Case XI.

INGUINAL HERNIA, SYMPTOMS DUBIOUS; OPERATION; CONSTIPATION RELIEVED BY THE USE OF PURE MERCURY: RECOVERY.

Henry Strain, aged 33, a labourer, an in-patient of the hospital for amaurosis and cataract, complained to the house-surgeon, November 14th, 1845, of pain in the bowels, and a swelling in the left groin. He said he

* This poor woman died suddenly of disease of the heart in December, 1845. I examined the body. I found the hernial sac on the right side contained omentum, which plugged the femoral ring. The sac on the left side was indistinct, and contained nothing. The coverings of both were much thinner than I expected to find them.

had a rupture for the last ten years, and had worn a truss, which never kept it up properly. In the afternoon the hernia descended, and he was unable to replace it. He did not complain of it till the morning of the 14th. The tumour was situated in the left side, was of the size of a lemon, and descended partially into the scrotum; it was tense. He referred the pain to the external abdominal ring, and making a sudden twist;" there is a great distension of the abdomen, but no sickness; flatulence very considerable; his countenance does not betray the anxiety peculiar to cases of strangulated hernia; pulse quiet; bowels not opened for twenty-four hours. Cold applications and other remedies, calculated to disperse the flatulence, were used to no purpose.

In the afternoon, Mr. Fowler proposed an operation, as the belly was hourly becoming more painful. Although the symptoms present were more like colic than strangulated hernia, it was deemed proper to liberate the stricture. The sac contained colon and omentum; the stricture was easily divided, and the finger passed into the abdomen, but we were unable to return the intestine. The integuments were brought together over it. Liq. Opii Sed., m. xxx.

In the evening his symptoms were unrelieved, he complained of violent pain in the abdomen, which was sore. Pulse 90, small; countenance much distressed. Ol. Ricini, oz. j., ex Aq. Menth. Piperitæ.

Nov. 15th. Has passed a dreadful night; has been very sick; pain severe in the belly, which is enormously swollen. Had a turpentine enema, and full doses of calomel and opium were given. In the evening he was still worse. Pulse small, and sickness continued; hiccough constant.

16th. Another bad night. Pulse small and rapid; constant sickness; scrotum enormously swollen, and very red. Another enema was administered, which brought away fæces and wind. Cajeput-oil, and calomel, and opium, have been given freely.

17th. Symptoms aggravated; vomits stercoraceous matter; the enemata have produced no effect; he appeared to be in a hopeless state; hiccough constant.

18th. Much the same. Mr. Fowler ordered the calomel and opium to be omitted. Twelve leeches to the scrotum, which threatens to slough. In the evening he became much worse, the sickness and tympanitis increased up to the present hour; the bowels have not been opened satisfactorily. Two drachms of pure mercury were given him; as soon as he swallowed it, Mr. Hartley informed me he looked ghastly, and complained of a curious sensation in the seat of the hernia. A few hours after the exhibition of the mercury, he passed a copious stool in the bed, but the nurse told me there was no appearance of quicksilver in it. The inflammation of the scrotum has diminished; the sickness is checked.

20th. Sickness returned once to day; complains of great prostration; tympanitis rather increased; is unable to sleep.

23rd. Has continued much in the same state since the last note; he was sick to day after taking castor oil; tongue brown and dry; the wound is sloughy; face flushed. Poultice the wound.

27th. Since the last note he has improved; the tympanitic state of the abdomen has diminished; has become soft. Treatment pursued has been to sooth the parts, a light nutritious diet, laxatives, and sedatives.

December 1st. Has had a slight attack of erysipelas from excess of diet, suppuration is extending up the inguinal canal. On percussing the abdomen a dull rumbling noise is heard; the wound is gaping, and the coats of the intestine are visible; has still slight erythma of the face, which may perhaps be attributed to the mercury taken for the amaurosis, and since the operation.

17th. A small abscess in the scrotum was opened to-day; the hernial protrusion retires into the abdomen when he lies down, which may be consequent on the absorption of the omentum.

29th. Suppuration spreading upwards; Mr. Fowler slit up the integuments for four inches, and a large quantity of matter escaped.

Jan. 29th, 1846. From the time of the last note every thing went on well with him. The wound is now well and he was discharged cured, but the hernia could not be kept up by a truss.

Case XII.

LARGE INGUINAL HERNIA; STRANGULATION; OPERATION: RECOVERY.

W. H., aged 57, the subject of an irreducible scrotal hernia for some years past, sent to my friend Mr. Fricker, Dec. 12th, 1845. He complained of sickness pain in the abdomen, and obstinate constipation.

December 15th. Mr. Fricker kindly requested me to visit him. I found a corpulent man, leading a sedentary, abstemious, and regular life; his countenance was free from anxiety; great pain all over the abdomen; a large irregular tumour in the left groin, extending into the scrotum; he vomited stercoraceous matter, and had constant hiccough; pulse 110; has had no stool since Dec. 12th. Everything calculated to relieve him had been done by Mr. Fricker. An operation was proposed and declined. Opii, gr. iij., statim.

16th. The operation for strangulated hernia was performed by Mr. Fricker; the sac was opened and contained a large quantity of omentum and colon, the stricture being divided. A small portion of the omentum was removed, but as there was some bleeding we judged it prudent not to remove more; the colon was adherent to the sac inferiorly. The edges of the wound were approximated over the tumour, and two grains of opium were given.

17th. Appears depressed; no vomiting; pulse 120; pain in the lower part of the abdomen, but bears pressure well; countenance good; unable to take anything excepting a little cold water. As soon as any fluid enters the stomach it produces vomiting and hiccough. He took two grains of opium. Infus. Rosæ cum Magnes. Sulph. As soon as he took the first dose of medicine it produced violent vomiting of fæculent matter. Creosote, m. iij., which did not check the vomiting. In the evening we visited him, and

found the vomiting had not stopped. A small quantity of sherry and water remained on the stomach. Pulse 110; tongue clean; the least movement to the left side produces vomiting. We deemed it prudent not to vex the stomach with medicine, and left him for the night.

18th. Has passed a bad night; constant vomiting of fæcal matter; pulse 110; countenance remains good; tenderness of the abdomen increased. In the evening he said he felt "a movement of wind downwards." With Mr. Fricker's concurrence, I now ordered an enema of turpentine and oil, which produced a copious evacuation; his pulse fell to 90, and he felt exhausted and inclined for sleep. Calomel gr. v., cum Opii, gr. ij. In the evening we found him somewhat better, still he is harassed by hiccough; free from sickness. Mist. Effervescens cum Ammonia et Tinct. Opii.

12th. Unable to sleep on account of hiccough; pulse 84; tenderness of the abdomen considerable. Infus. Rosæ cum Magnes. Sulph., which operated freely. We prescribed some lemon ice in the day, which relieved the distressing hiccough.

20th. Has had several copious stools; is cheerful and doing well. The wound is healing by granulation.

From this time till the end of January, 1846, he went on favourably and is wearing a bag truss. The hernia is quite as large as it was before the operation; he complains of a dragging pain in the abdomen, and occasional irritation of the stomach and bowels.

Case XIII.

FEMORAL HERNIA; STRANGULATION; OPERATION: RECOVERY.

Jane Barnett, aged 85, admitted March 17th, 1847, under the care of Mr. Fowler, with a femoral hernia of the right side. Symptoms of strangulation have existed since the 15th; vomiting; constipation; slight tenderness of the abdomen; pulse 80. She is of a spare habit; there is a tumour in the right groin, about the size of a walnut; she has never worn a truss, and is the subject of a procidentia uteri, and very deaf.

8, p.m. Mr. Fowler operated; the whole proceeding did not occupy more than five minutes. The fascia propria and sac formed an agglutinated mass, much thickened, and there was a small quantity of fluid in it. The sac contained a knuckle of dark-coloured intestine; the stricture was divided on a grooved director, and the protruded part reduced. Calomel, gr. iij., Opii., gr. iss., were given.

March 18th. Has had no vomiting since the operation; no action of the bowels; urine drawn off by catheter; pulse 84. Ol. Ricini, oz. j.

19th. Has had several stools; countenance a little flushed; pulse 90. Ordered nourishing diet. Mist. Cretæ. Comp. cum Liq. Opii. Sed.

20th. The purging stopped. Meat diet.

26th. Quite well.

Case XIV.

CONGENITAL INGUINAL HERNIA; DESCENT OF THE TESTIS, INCOMPLETE; OPERATION: RECOVERY.

Mr. J., aged 26, sent for Mr. Whitmore, November 1st, 1832, late in the evening, complaining of pain in the bowels. A tumour, about the size of an egg, situated in the left groin, was discovered, tense and very painful on pressure. He had been sick, and felt slight pain in the bowels; no stool since October 29th.

After giving some general directions, Mr. Whitmore left him for the night, being in attendance on a dangerous labour. On visiting him the next morning, Mr. Whitmore found him vomiting, with an anxious countenance, and the usual symptoms of strangulated hernia. The warm bath, bleeding from the arm, and a moderate use of the taxis were tried, but the reduction of the hernia was not effected. Neither testis had descended into the scrotum. He gave the following history of the case:—

He has had a rupture as long as he can remember; and about fifteen months since he had a similar attack to the present one, while residing in the country. He sent for a surgeon, who failed in affording him any relief. Having dismissed this practitioner, he applied to a noted quack-doctor. The case being one of obstinate constipation, he administered a drastic purgative powder, which he called "golden dust;" and after each dose he made the patient walk about the room. The rupture was reduced.

At 12, p.m., Mr. Fowler saw the patient, with Mr. Whitmore; an operation was proposed and performed by Mr. Whitmore. The sac was opened, and a quantity of fluid escaped; the contents were omentum and bowel; the stricture being divided, they were returned. The testis was found lying in the sac, and at the mouth of the external ring; it was small, but otherwise healthy. The patient recovered without a bad symptom.

(*To be continued.*)

THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(*Fourth Series of Experimental Researches.*)

By William Addison, M.D., F.R.S., Malvern.

(*Continued from page* 231.)

XIII. Regular, Irregular, Retrograde, and Ascending Metamorphoses in Animal Textures.

"If we examine the broken ends of a fractured bone from the first to the tenth day after the injury, we shall find the periosteum and medullary membrane torn, the neighbouring soft parts swollen, and an effusion of blood around and between the fragments. The periosteum is more vascular, *it has lost its fibrous character*, and a reddish fluid is effused into its substance. The medullary membrane undergoes similar changes,—the marrow assumes a kind of fleshy appearance, and a viscid gelatinous matter makes its appearance in the situation of the fracture.

"From the tenth to the twenty-fifth day the soft parts in the immediate situation of the fracture become more solid, and adhere more intimately to the matter between the fragments, which has now assumed the *fibrous form*, and the membrane filling the medullary

cavity is also connected into a *fibrous texture*. From the twenty-fifth to the fiftieth day this fibrous texture gradually becomes *fibro-cartilaginous*, and then *osseous*. In from three to six months the whole substance between the fragments is converted into *bone*, and the injured limb is restored to its natural state." *

The textures surrounding the extremities of a fractured bone are irritated textures; they have been violently torn and wounded, and their vascularity and nutritive actions are increased by reason of a law existing in all living textures, by which irritated parts have an increased amount of nutritive elements determined towards them for their succour, or to support them under the infliction. We see the demonstration of this law, not only in the transparent web of the frog's foot, and in all parts of the human structure, during inflammation in a fractured bone, and in the prick from a pin's point, but also in all kinds of vegetable structure. "Galls or tumid excrescences," says Dr. Lindley, in speaking of the diseases of vegetables, "are local affections, caused by the puncture of insects; they are produced by an excessive deposition of cellular tissue, and are of no consequence to the general health of the individual subject to them." In these cases of galls and excrescences, the little insect not only irritates the living texture, thereby causing an increased deposition of cellular texture, but it actually models the excess produced by the irritation to its own use and purposes. Now, the facts related shew that, in the repair of a fractured bone the morphological stages observed are,—first, a viscid protoplasma or lymph, derived from, and mixed with, colourless incoherent cells or corpuscles;—then a very vascular texture, excreting cells;—then a fibrous texture, less vascular, and not excreting cells;—then fibro-cartilaginous;—and lastly, osseous textures. This order being in all respects the same with that observed in the growth of the textures from their embryo state, is *therefore* regular. But it is of the utmost importance in regard to practical medicine that the phenomena of a regular metamorphosis should be regarded in respect of time, for although the several textures pass by insensible limits into each other, yet there are no difficulties in recognizing the distinctions between lymph, fungosities, fibrous texture, cartilage, and bone; or between pus, mucus, and abnormal fibrous textures, and tubercles. Let me therefore recapitulate the phenomena with reference to the times.

From the first to the tenth day the following series has been observed in the textures involved in the injury of a fractured bone:—(1.) The soft parts are swollen and there is an effusion of blood. (2.) The periosteum and the medullary membrane—*i. e.*, the irritated or injured textures,—become more vascular, a new matter is effused into their substance, and they lose their normal characteristics. (3.) The marrow assumes a fleshy appearance, from which a viscid glutinous matter, a protoplasma, is excreted. *From the tenth to the twenty-fifth day*:—(4.) The soft parts become more solid, cellular or corpuscular forms are excreted in less quantity, the number of blood-channels diminishes, and the matter between the fragments of bone assumes the fibrous form. (5.) The fleshy appearance filling the medullary cavity is converted into a fibrous texture. *From the twenty-fifth to the fiftieth day*:—(6.) This fibrous texture gradually becomes fibro-cartilaginous, and then osseous.

These are but rough approximations towards the establishment of times and periods, more accurate researches are required to establish correct stages for the normal morphology.

Irregular Metamorphosis.—In the disease termed rickets, the bones resemble very vascular cartilage, and the medullary canal is filled with a reddish gelatinous matter instead of marrow; the structure everywhere presenting a much more red and vascular appearance than healthy bone.†

I forbear to notice many local diseases and congenital defects which might appropriately perhaps be placed under this head,—nævi, warts, fatty tumours, &c., my attention being now confined to those irregularities and changes which connect scrofulous diseases with the law of the metamorphosis.

Retrograde Metamorphosis.—The facts, proving that phthisis or consumption is a retrograde metamorphosis of the parenchyma of the lung, have already been mentioned. In the disease termed mollities ossium, the smooth surface of the bone is raised by internal growths and red projections, visible through the periosteum. The cancellous cavities of the bone are filled with a gelatinous substance, composed of myriads of colourless cells, of different sizes, forming a soft incoherent cellular or corpuscular texture. In some cases the bones become so soft and flexible, that they may be bent in any direction; and they have the properties and appearance of a highly vascular texture, which secretes or excretes a gelatinous matter, "containing multitude of corpuscles, of the same size as the corpuscles of blood, each filled with a minutely granular matter."‡

In scrofulous joints we see, during the progress of the disease, almost every grade and variety of texture,—

* I am indebted for the above account to the industry of Mr. Gulliver, who has collected the facts bearing upon the subject from Dupuytren and Breschet, and stated them in his usual clear and satisfactory manner. Vide *Edinburgh Medical and Surgical Journal*, July, 1835. I have particularly examined with the microscope the nature of the "fleshy appearance" or fungosity, and find it a corpuscular excreting texture, full of blood-vessels, and abounding with colourless cells.

† "Cyclopædia of Practical Medicine." Art., Rickets.

‡ Solly—"Medico-Chirurgical Transactions," vol. xxvii; Cumin—"Cyclopædia of Practical Medicine." Art., Mollities Ossium; and Dalrymple—"Dublin Quarterly Journal of Medical Science," Aug., 1846.

pus, tuberculous matter, fungosities or granulations, lardaceous, fibrous, and cartilaginous textures. Fungosities or granulations are highly vascular textures, assuming a kind of fleshy appearance, excreting in abundance a viscid gelatinous matter, and colourless cells, (pus;) lardaceous tissue is an intermediate form between fungosities and fibrous texture; it is in fact a highly vascular corpuscular excreting texture, ascending to the fibrous non-excreting form, which is the natural order, and "its presence," as Bonnet states, "indicates a better state of constitution than the existence of fungosities alone does; but its metamorphosis into fibrous texture is indispensible to the recovery of the joint.*

Case.—"A pale-looking boy, sixteen years of age, came under treatment for dropsy of the belly and anasarca, and died gradually exhausted with hectic fever. He had no symptoms which could have revealed the existence of the disease found on examination after death. The cavities of the chest and belly contained much serous fluid. The peritoneum was everywhere thickened, and studded over with tubercles. The glands of the mesentery were enlarged and tuberculous. There was an immense abscess, containing four pints of curdy pus, situated on each side and in front of the spine, which was denuded of periosteum. The kidneys were enlarged and pale. There was a cicatrix on the inner aspect of the left shoulder, where an abscess had opened two years previously, which, after discharging matter for some time, healed. On opening the joint pus escaped; the articulating surface of the humerus was rough from being denuded of its usual smooth covering. A section exposed to view a perfect specimen of yellow tubercle, in the cancellated structure of the head and neck of the bone. The cancellated texture was deeply congested with blood, intensely red, and slightly softer, than in its healthy condition; in the midst of the red cancelli were seen the straw-coloured tubercles; similar tubercles were also found in the diseased lumbar vertebræ."†

In remarking on the above case, Dr. Watts states "that the formation of tubercle in the bones had been doubted by many, and it is only a few years ago that the question was satisfactorily determined in the affirmative. Respecting the manner in which tubercles form in the osseous structure, the cancellated structure becomes congested with blood, its nutrition is disturbed, it apparently has some tendency to soften, and a badly vitalized lymph is exuded in spots, and forms into tubercle, all of which may happen without the excess of heat or manifestation of pain usually attending inflammation."‡

We have seen in respect to a regular metamorphosis in the union of a fractured bone, and in the healing of wounds, that a viscid gelatinous matter, lymph, or protoplasma is an early morphological form, and also that a similar matter is almost universally found shading off into pus or tuberculous matter in scrofulous diseases. Louis, whose authority is paramount in all questions relating to the pathology of phthisis, says that he has detected this matter in both its principal forms,—granulations, and larger shapeless masses, in all the fibrous textures, in the pleura, on the free surface of the peritoneum, in the substance of the pia mater, and in the great omentum; and he adds that in all these situations he has found it susceptible of transformation into opaque tubercle, and in this opinion he coincides with the conclusion previously formed by Laennec. The observations of Louis, and the conclusions of Laennec upon this point, are quite in accordance with the facts and morphological doctrines deduced from my microscopical investigations, which have shewn that the lymph or protoplasma of the blood consists of colourless cells, molecules, granules, and nuclei, imbedded in viscid fibrillating material; that the lymph is suscepticle of conversion into pus by the addition to it of an unusual multitude of cells derived from the blood current; into fibrous texture, upon the fibrillation of the coagulable element; and into tubercle, by the rupture of the cells and degeneration of elements, when the morphological tendencies of the textures on which the lymph appears, are retrograde.

An increased redness or vascularity of a texture, with an increased nutritive activity and new products, has been considered characteristic of inflammation; but it is manifest, that an increased redness, with an increased nutritive activity and new products, followed by the union of a fractured bone by bone, has a very different result from the nutritive activity which fails, (in rickets,) to accomplish the required conversion into bone, and from that also which (in mollities osseum,) accomplishes the retrograde conversion of an osseous texture into a corpuscular one, which changes the textures of a joint (scrofulous joints,) into fungosities, tuberculous matter, and pus, and converts (in phthisis,) the coherent cellular parenchyma of the lung into similar degraded forms.

In the first example, the fractured bone, the injury gives rise to an increased vascularity and nutritive action, and the result is, that in a certain time "the injured limb is restored to its natural state." The limb being restored to its natural state, the metamorphoses is natural, and being natural, it is also conformable or regular. But an increased vascularity, with an increased nutritive activity, and conformable products, fulfils the definition before given of simple, healthy, or *conservative* inflammation; and it follows, therefore, that simple inflammation attends the reparation of a fractured bone. If the metamorphosis happen to be arrested at any stage short of perfect ossification, the limb will not be restored to its natural state; in that case the metamorphosis would be unconformable or

* The quotation is taken from the *British and Foreign Medical Review* Art. Bonnet—*Traité des Maladies des Articulations*, January, 1846.

† Dr. Watts—"Manchester Pathological Society."—*Medical Gazette*, Jan. 1, 1847.

‡ *Loc. cit.*

irregular, and the inflammation (the redness and vascularity,) *therefore* unhealthy.

In the second example, (rickets,) the normal metamorphosis is arrested, and the cartilaginous texture, notwithstanding its redness and vascularity, will not proceed to bone. The metamorphosis is therefore irregular; and if we call the redness and vascularity, inflammation, the inflammation is unhealthy.

In the third examples, (genuine scrofulous diseases,) mollities ossium, scrofulous joints, and consumption, the natural textures, from an *inherent disposition*, or an *irritation* coming from without, or from both these causes acting conjointly, are unable to preserve their type, and with an increasing vascularity, fall rapidly back into lower and earlier forms.

A retrograde metamorphosis, it will be observed, does not embrace any of the changes resulting from a loss of vitality, it simply expresses a fact of living structure,—the replacement of a later or higher texture by one of an earlier or more primary type, and the phenomenon is one of great energy and activity; new textures, new vessels, and new products, are as rapidly formed as when the structure was evolving from its embryo state.

In any comparison of the phenomena of a retrograde metamorphosis in plants, with scrofulous diseases in animals, wide differences and distinctions must of course be expected. Plants have no nerves nor muscles, nor have they a rapidly circulating corpuscular fluid or blood; their organs are more uniformly cellular in texture than those of animals, and thus in them it happens, that an entire organ may be converted into the form and shape of another; an event not observable in the more multiplied textures of the organs of animal bodies. Such a transformation, however, necessarily involves a change of texture, and it is with *the textures* rather than with *the organs*, that the morphological analogies between plants and animals must be traced. The retrograde metamorphosis in plants is to a green leafy parenchymatous texture, which having the properties of a solid, must therefore have a form and shape, and it is this which constitutes the abnormal leaf or leafy texture. In animals, the retrograde morphology is to the cellular elements and protoplasma of the blood, (the primary nutritive condition of the solid textures,) which having more the properties of a fluid than a solid, are therefore without definite shape or fashion. Hence the term ulceration is applied to scrofulous diseases in animal textures, in which the solid texture gradually softens, and being replaced only by a fluid or semi-fluid protoplasma, and incoherent cells, large excavations and hollow places, termed abscesses, are left filled with what is technically termed pus, or mucus; and the morphology is more rapid and energetic in animals, because a current of protoplasma and incoherent cells, is at all times ceaselessly flowing through all parts of their structure.

The general conclusion derived from these investigations is,—first, that a morphological law governs the transformations of the elements of the human structure, analogous to that established in respect of plants, in which the normal order is, soft corpuscular textures, coherent cellular, elastic fibrous, firm cartilaginous, and hard bone. The intermediate or transitional forms being fibro-corpuscular, fibro-cellular, and fibro-cartilaginous. Secondly, that whatever may be the type, or nature, or function of an organ, there is, as a consequence of the order or law of its evolution and nutrition, a disposition in the textures composing it—exhibited upon appropriate conditions applied—to revert or go back, especially during the period of their growth, to the primary incoherent corpuscular condition out of which they were originally metamorphosed. Thirdly, that scrofulous diseases are special examples of this disposition, proofs of an irregular and retrograde morphology. But as the conclusions here enunciated will hereafter be converted into principles for the prevention, treatment, and cure of scrofulous diseases, inflammation, and consumption; so therefore it is desirable, to support them by as many points of similarity between the growth of animal and vegetable textures, as occur to me at the moment.

In the first place, then, it has been stated, that in plants an inherent disposition to a retrograde metamorphosis is transmitted from the parent plant to the seed, and that unfavourable external conditions will produce the same result in otherwise healthy individuals, for in the human subject parents impart or transmit to their offspring an inherent disposition to scrofulous diseases, and unfavourable external conditions will bring about the same result.

"It may truly be asserted," says Dr. Cumin, "That no original temperament or frame of body confers immunity from scrofulous diseases, for it is observed to originate in the healthy offspring of healthy parents under circumstances the principal of which are habitual exposure to cold and damp, with insufficient food, privation of pure air, and want of healthful exercise. Instances are recorded where persons in good health have been affected with scrofulous diseases after being confined in dungeons or prisons, and there scantily fed. The influence of such causes in producing scrofulous diseases in the inferior animals, has been made the subject of experiment by Dr. Jenner, Dr. Baron, and others, and the results have satisfactorily proved, both the great extent of that influence, and the power we possess of removing the factitious disease by replacing the animals in healthy situations, and supplying them with wholesome food."

Scrofulous diseases in animals, therefore, have this additional analogy or similarity with the retrograde metamorphosis of plants, viz., that the phenomena arise in both from precisely the same causes,—an inherent disposition transmitted from parent to offspring, and

unsuitable external conditions; moreover, experience proves that no person can be considered as exempted from scrofulous diseases, and this result ought to follow if my conclusion be true,—for if these diseases be retrograde morphological states, arising from a law of nature pervading all living structures, there can be no exceptions in favour of individuals.

(*To be continued.*)

OPERATIONS PERFORMED UNDER THE INFLUENCE OF ÆTHER.

By W. C. Worthington, Esq., F.R.C.S., Senior Surgeon to the Lowestoft Infirmary.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

Sir,

I was much struck with the value and importance of your remarks on the subject of æther-inhalation, contained in the Journal of March 10th, and am quite of your opinion, that practitioners residing in the country are imperatively called upon to co-operate with those of the metropolis, in helping to elucidate the use of the letheon, by a faithful record of cases. It must be acknowledged that great circumspection is required in the employment of any new agents, when it happens that the functions of so important an organ as the brain are manifestly influenced by its operation. In a former number of the Journal I reported the result of eight cases of surgical operation, in which the inhalation of æther had been employed. Since that time some further cases have fallen under my notice, which I beg leave to transmit for insertion.

Case I.

Thomas Rose, aged 42, a labourer at the Lowestoft Harbour Works, was received into the Infirmary March 5th, with his right hand severely crushed by the heavy bell of a pile-driving machine falling upon it. After the accident he was incautiously allowed to walk from the works to the Infirmary, a distance of three quarters of a mile. The fatigue arising out of this circumstance, added to the shock the nervous system had so recently sustained, caused a considerable degree of collapse to follow. Amputation was considered necessary, but the operation was deferred two or three hours, until some degree of re-action took place. Previously to commencing it, an attempt was made to letheonize the patient. After a few inhalations, his respiration became extremely hurried. At the end of two or three minutes, to the amazement of myself and those present, he started from his seat in a state of furious delirium, vociferating the most awful curses, at the same time stamping vehemently with his feet, and throwing his arms about in a most wild and frantic manner, requiring four or five persons to restrain him. This paroxysm lasted nearly four minutes, when he fell back in his chair, apparently somewhat exhausted. Upon returning consciousness, which soon took place, he remarked it was "*rum stuff he had been taking, but now was all right again.*" The operation was then performed, which he bore with calmness and fortitude. It was afterwards ascertained the patient was of an exceedingly irritable habit, and addicted to intemperance; and when under the influence of intoxicating drink, he became so exceedingly noisy and quarelsome, that it was with difficulty he could be prevented doing mischief. Here evidently was a case where the inhalation of æther was inadmissable, and it shows the importance of inquiring into the habit and temperament of individuals, previous to undergoing the narcotizing process.

Case II.

March 15th. Sarah Sullins, aged 43, a patient of the Infirmary, was narcotized previous to submitting to excision of the left breast for carcinoma. She went through the operation without any expression of pain, and when asked if she experienced any during its performance, she answered in the negative, but confessed she was not altogether unconscious of what was going on. After removing her to bed, she remained several hours in a perfectly tranquil state, and free from pain, her condition very much resembling that produced by a mild opiate. For some days she progressed favourably, when erysipelas attacked the wound, and thereby retarded recovery.

Case III.

April 7th. Mary Read, aged 22, an Infirmary patient, was narcotized previously to being operated upon for ganglion, situated on the anterior part of the wrist. A sharp-pointed straight bistoury was passed through the swelling, and a probe armed with cotton rapidly followed. On recovering from the effect of the æther she expressed herself as not being altogether unconscious that the operation had been performed, but suffered no pain. No unpleasant symptoms followed.

Case IV.

The same morning at the Infirmary, I removed the middle finger, at the metacarpal bone, of a man, aged 22. He was of an exceedingly calm temperament, and sober habits. No difficulty was experienced in narcotizing him. The stupor lasted nearly five minutes. When restored, his first impression was, he had been travelling on the railroad to Norwich, and had passed some days very agreeably with his friends. He manifested great surprise on being informed he had undergone the operation, and some minutes elapsed before he could be persuaded of the fact. No unfavourable symptoms followed.

At the Infirmary, on the same morning the two preceding operations took place, an aged female was couched in both eyes, and also another patient submitted to the extirpation of a malignant tumour from the inner canthus of the eye. In neither of these cases, however, did I deem it advisable to employ æther. The age of the former patient was considered a sufficient reason for not using it. The latter had for some months before been treated at the Dispensary of a neighbouring town for paralysis, from which she had not entirely recovered, and, notwithstanding she earnestly intreated to be permitted to inhale, the request was not complied with, upon the supposition that there might still exist a

condition of brain unfavourable to be acted upon by the narcotizing process. The patient was of an irritable habit, and exhibited great impatience under the operation. The tumour being deeply imbedded in the angle of the eye, and closely adherent to the conjunctival membrane, required some caution in its removal.

There were present at several of these operations, Dr. Wake, of Southwold; Mr. Garness, of Bungay; Mr. Hanner, of Wrenthaw; Mr. Jeffrey, of Lowestoft; also Messrs. Breame, and Prentice, assistant surgeons to the Institution, whose experience and tact in the management of the æther apparatus rendered their services particularly valuable to me.

W. C. WORTHINGTON.

April 16, 1847.

SOURCE OF THE CATAMENIAL DISCHARGE.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The physiology or the source of the catamenial discharge, so peculiar to the human female, and the functions of the interior of the uterus positively ascertained, are subjects comparatively of very recent discovery, and as the opportnities are so rare of our having proof or of our obtaining any decisive means of determining the matter or establishing the fact, that the uterus is the source of this healthy and proper sexual secretion, I think the following evidence may be interesting to the readers of the *Provincial Medical and Surgical Journal*. Should you be of that opinion perhaps you will find room for it in an early number:—

On Saturday, the 27th ult, I was applied to by a medical friend to assist him at a *post-mortem* examination, under an order from the city coroner, of a woman who had hung herself, the jury not being able to agree in their verdict. It is not often that a medical man is called on to make a *post-mortem* examination for the purpose of assisting the jury in coming to a correct verdict after death from hanging, the cause of death being so palpably visible; and how that twelve wiseacres could suppose that we should, by an examination after death, be able to discover the motive that could have induced this poor creature to commit such a rash act I cannot conceive. But their ignorance was bliss *to us*, as it gave us an opportunity of making a very interesting examination.

The external appearance, and the gorged state of the blood-vessels of the brain, clearly proved that death had been caused by strangulation, and it also proved Dr. G. Burrows' theory on this subject to be correct. In removing the abdominal viscera we were struck with the size and vascular appearance of the uterus. As we understood she had been confined three months before, and the child soon after died, we thought the uterus might be impregnated, but on laying it open it presented to our view a most beautiful velvet-like appearance; the whole internal surface was covered with a dark, sanguineous mucus, which seemed to be exudating from it and could be easily scraped off. This unusual appearance we at once suspected to be the catamenial secretion, or the commencement of the process of menstruation. There was no appearance of any discharge in the vagina, and in order to satisfy ourselves on the point as to whether she had been regular since the birth of the last child, we made inquiry, and learnt from a female friend who lived in the house with her, that she had menstruated *once* since her confinement, and she thought that she was expecting it again in a day or two. There is then indisputable evidence, and the strongest corroborative proof of the fact, that the source of the menstrual discharge, once so much disputed, is the inner membrane lining the uterus, and I think the strongest case recorded. As it is well known, and many remarkable cases are recorded, that hanging has a very curious effect on the organs of generation of the male,—Query, Did the apparently enlarged uterus, and the vascularity of the external part of this organ, arise from the process going on within, or from the mode of death? Perhaps some of your learned readers may be able to inform me.

I am, Sir,

Your obedient servant,

GEORGE KING.

Bath, April 13, 1847.

Hospital Reports.

HÔPITAL DE LA PITIÉ, PARIS.

A CASE OF SCURVY, WITH PURPURA HÆMORRHAGICA.

Communicated by SEPTIMUS LOWE, Esq., M.R.C S.E.,

History of the case: present attack; symptoms on admission; continuation of the case; treatment.—Remarks; actual condition of the system.—Names applied by Professor Piorry, to express each organic change; alterations of the blood.—Andral's views.—Difference between scurvy and chlorosis; causes of the symptoms; differing from a case of true sea-scurvy. Probable causes; indications for treatment; prognosis.

L. B., a man aged 62, was admitted into the Hôpital de la Pitié under Professor Piorry, March 31st, 1847. He is of the ordinary stature; of strong conformation; pale, dusky, sallow complexion; and nervo-bilious temperament. He is a stocking-frame worker. Until within the last six years he was in very comfortable circumstances, had sufficient employment, lived well, was well clothed, and always very regular in his habits. During the last six years he has only been able to obtain a day's employment occasionally; he has consequently lived upon worse food, and been worse clad than formerly; he has also suffered considerable anxiety of mind. He is a native of Paris. For the last three months he has led a very irregular life; he has not been able to obtain a single day's employment; he has wandered about from place to place, generally sleeping in a close, damp, dirty apartment, together with several other persons; and has lived entirely upon brown bread (and that in insufficient quantity,) and water. He was formerly very robust,

and enjoyed excellent health, but for the last few years he has become much thinner and weaker. About thirty years since he passed several tape worms, and was in the hospital for about three weeks in consequence. Since then he has occasionally passed one; and the last he remembers to have seen was about two years ago. They did not occasion him much inconvenience, and he only felt a slight degree of uneasiness in the abdomen. During the excessive heat of last summer his feet became considerably swollen and œdematous, so that he could scarcely walk. After resting a few days the swelling disappeared, and he continued well, until within the last three months. Since last January he has been gradually getting thinner and weaker. He has had occasional diarrhœa, lasting three or four days, and alternating with constipation of the same duration. About six weeks ago he perceived his feet become again swollen, and soon afterwards a discolouration of the skin on the inner side of the left ankle and leg, as high as the knee; the skin in the hams became hard, and the calf of the left leg painful on pressure; he had a disagreeable taste in the mouth, the gums became swollen and puffy, with occasional oozing of blood from their surface. About a fortnight since he had frequent attacks of dizziness; he found he was not able to see at all in the evening, and was so feeble that he could not walk. From this time he has been confined to bed, and has been gradually getting worse and worse. He was not put under any treatment previous to his admission.

At present the surface is colder than natural; the skin is dry, and in several parts rough and scaly, especially on the inner parts of the legs and thighs, the sides of the trunk, and the back. In the hams the skin is excessively hard and thickened. The feet are swollen and œdematous, as well as the left leg and thigh. There are large patches of ecchymosis around the ankles, upon the legs, (especially the left one,) and on the sides of the trunk, from the axilla to the cristi ilii; there are also petechiæ on the thighs and upper extremities. On the left leg the skin is in parts of a deep yellow colour. Along the course of the internal saphena vein of the left leg there is considerable tenderness on pressure, and the discolouration is here more marked. The face is of a pale, dirty, yellowish colour; the lips are pale; the scleroticæ are yellow. The respiration is natural; the lungs are healthy in front, but behind there is slight emphysema on both sides; there is slight cough; the sputa are scanty and frothy. The heart is somewhat enlarged; the bruits are normal; there is no *bruit de diable* in the neck; the pulse is small, weak, frequent, and regular, 96 in the minute. The gums are swollen, with a dirty purple appearance; there is no oozing from their surface. The tongue is moist, furred, and very pale, and is marked along its borders by the pressure of the teeth; there is a disagreeable taste in the mouth, and the breath is exceedingly offensive; the appetite is tolerably good; there is no thirst, no nausea or vomiting, but slight uneasiness in the epigastric region after taking food. There is solid matter in the large intestines; the bowels are regular; the stools are solid and fœtid. The liver is smaller than natural. The spleen is normal. The urine is passed freely; is of the usual quantity, pale in colour, free from albumen, of alkaline re-action, and contains a flocculent cloud. The kidneys percussed from behind, are found to be of their usual size. Ordered a simple enema. To have full diet, consisting of fresh meat and fresh vegetables; to take three tablespoonfuls, of lemon juice three times a day; the legs and sides to be rubbed with sweet almond oil.

April 2nd. The patient complains that he cannot sleep well at night; there is tenderness on pressure on the calf of the left leg; the roughness of the skin on the legs is somewhat diminished; the bowels are regular; pulse still weak, but less frequent. Ordered to have a warm bath; the legs and feet to be elevated.

5th. The left leg is less swollen, and not so tender on pressure; the urine is rather higher coloured and still alkaline; the tongue is rather cleaner. Ordered to have a bandage applied from the left foot to the hip; continue the lemon juice, &c.

7th. The yellowness of the scleroticæ has disappeared; the gums are still spongy, but more healthy in appearance; the patient can see rather better in the evening, but he cannot clearly distinguish objects; the pulse is rather firmer; the urine is neutral; the bowels are regular. Continue.

10th. The tongue is cleaner, and not so œdematous; there is still a disagreeable taste in the mouth; the breath is less offensive; the swelling and œdema of the legs are somewhat diminished. Continue.

15th. The discolouration and roughness of the skin on the sides of the trunk have quite disappeared; the tenderness along the course of the saphena vein is much less marked; the aspect of the face is greatly improved; the urine is slightly acid. Ordered to continue the lemon juice, and to take a drachm of subcarbonate of iron three times a day.

From this time he continued to improve daily, both in strength and appearance. On the 21st the report is,—the face and general appearance are greatly improved; the gums are quite natural; the tongue is clean, but still rather pale; the heart, which measured five inches from base to apex, and three inches and a half from above downwards, now measures three inches in the latter direction, and four and a quarter in the former; the swelling of the feet and legs has entirely disappeared; the only discolouration of the skin now observed, is a slight yellowness on the left leg; the bowels are regular; the urine natural. The patient is convalescent.

24th. The improvement still more marked; the patient may leave the hospital in the course of a day or two.

Professor Piorry, in his clinical remarks, observed that this was a case still called by most authors scurvy, with purpura hæmorrhagica; these terms, like a great many others employed in medicine, were as unmeaning as absurd,—terms which presented to us none of the seizeable circumstances of the disease, nor indicated in the least degree the actual condition of the organs; but, if we studied the case carefully, symptomatically,

and scientifically, we should readily arrive at a just appreciation of the exact nature of the disease, be enabled to apply a sound and rational treatment, and be led to adopt expressions in accordance with the character and situation of each lesion. What did we find to be the condition of the system in the case before us? In the first place there was evidently hypoplastæmia or diminution of fibrin in the blood; 2nd, hydrhæmia or a watery condition of the blood; 3rd, hyphæmia or diminution of the blood-globules, commonly called anæmia; 4th, cardiasia or dilatation of the heart; 5th, phlebemphraxia or obstruction in the venous circulation; 6th, dermorrhagia or effusion of blood under the skin; 7th, hydrethmia or effusion of serum into the cellular tissue, &c. By applying these terms we expressed clearly and succinctly the whole chain of alterations in as few words as possible, and were enabled to seize at once each particular fact of interest in the case.

Besides these observations of Professor Piorry's, this case presents some points of considerable interest, and several of the important changes observed in it appear to be worthy of a more detailed account.

Dr. Elliotson, in speaking of scurvy, says "that it seems to be the universal opinion that it owes its origin to a morbid change in the fluids, and especially in the blood. Notwithstanding this general belief, there has been no attempt, up to the present time, at any chemical examination of scorbutic blood." But the late researches of Professor Andral appear to have thrown considerable light upon this subject. He observes in his "Hæmatologie Pathologique," that this disease (scurvy,) resembles chlorosis in certain respects, and both have many symptoms in common. In both we have the same feebleness, the same vertigo, the same aberrations of sensibility, the same dyspepsia, &c.; but what immediately distinguishes scurvy from chlorosis is, the facility with which hæmorrhages occur in the former, to such a degree indeed that it is one of its most characteristic symptoms. Why is there this constant tendency to hæmorrhage in scurvy?—and why is it so comparatively rare in chlorosis? Because in the former there is a modification of the blood totally different to what we observe in the latter. In scurvy the globules are not generally diminished to such an extent as in chlorosis, but the fibrine is considerably below its normal amount, and this has been found to be the case also in typhus fever of the adynamic or putrid kind, which, from a consideration of the alterations of the blood, as well as the general nature of the symptoms, was called by Bordeu *acute scurvy*.

Again, Professor Andral says he had long considered the fibrin of the blood to be deficient in quantity in scurvy, and he was enabled to verify this supposition in the month of April, 1841. A patient was admitted into the Hôpital de la Charité, with all the worst symptoms of the disease. He was bled, and the blood found to contain—119, globules; 86, solid matters of the serum; and only 1.6, of fibrin. Professor Andral further adds, that he has no doubt it will be found also that the fibrine of the blood is below its normal amount in all well-pronounced cases of purpura hæmorrhagica; and he affirms, that in a case of purpura, which resembled in its symptoms the most aggravated case of typhus, he found the blood continued in a state of fluidity.

Again, it may be asked, is there not some other alteration of the blood, which may produce this diminution in its normal quantity of fibrin? Before the fibrin diminishes, may there not be some other change of composition, of which the diminution of the fibrin is only a consequence? Majendie injected subcarbonate of soda into the veins of a living animal, and after death he found a "dissolution" of the blood. In individuals who have died from putrid fever or scurvy, where the blood is less coagulable than usual, some authors affirm that they have found a larger than normal amount of alkaline substances. Professor Andral in his researches has observed amongst other facts that the blood which contained the most free alkali was that taken from the scorbutic patient mentioned above, and this observation is in accordance with what M. Frèmy announced some years ago.

But these are not the only alterations of the blood observed in the case before us. It is evident from the symptoms that there is also a state of anæmia or diminution in the quantity of the globules, and with this condition it is also probable that the globules themselves are altered in structure and conformation. Professor Andral observes on this head, "It would be very interesting to know if the globules, at the same time that they diminish in number in anæmia, do not also alter in their structure, and if there is not a tendency to undergo, complete destruction. It appeared to him in two cases of chlorosis, that the globules had become much smaller than we generally observe them to be, at the same time a certain number had not their usual form, they were as if broken up and dispersed, and resembled fragments in the field of the microscope."

Again, it is very probable that we have also in this case, a diminution of albumen, with increase in the relative amount of watery constituents of the blood, of which the effusion into the cellular tissue is a clear evidence; for Andral says that patients never become dropsical from loss of fibrin, but from loss of albumen; and he asks whether it is a case of simple exosmosis, favoured by the diminished density of the blood, or is it rather the serum of the blood which escapes more easily into the cellular tissue, from being less charged with albumen, and consequently being less unctuous in its character, glides less readily along the inner surface of the vessels?

The difference we observe between a case of this kind and one of true sea-scurvy, would appear to be, that while in the latter we have merely (at least in the less advanced cases,) an increased amount of free alkali in the blood, with a diminution in its fibrin, in the former we have, in addition to this, a diminution both of the globules and the albumen.

These alterations of the blood may be well considered to have induced the symptoms, and are amply sufficient to account for the whole chain of morbid conditions observed in this case. Thus, the lack of fibrin, and the alteration in the structure of the globules, will

account for the effusion of the colouring matter under the skin, causing the "purpura," which is here merely a symptom, and not as Dr. Elliotson believes, a distinct disease; the deficiency of albumen, causing œdema of the legs, feet, &c., whilst the extremely impoverished condition of the blood in general would no doubt speedily induce dilatation of the heart, atrophy of the liver, vertigo, thickening of the skin, derangement in the digestive organs, sponginess of the gums, obstruction to the circulation in the superficial veins of the leg, &c. &c.

In considering the causes which may have produced this condition of the blood; we may ask if it is not probable that the deleterious nature of the food which the patient has taken may have contributed towards inducing it? The brown bread on the Continent often contains a large proportion of rye, and consequently also the ergot. Dr. Wright observes, that "the long continued use of the ergot often produces a cachectic state of the body, indicated by extreme muscular wasting and weakness, loss of appetite, frequent pulse, fœtor of the secretions and excretions, congestion of the alimentary mucous membrane, excessive contraction of the spleen, &c." But although this may have contributed in some degree towards the production of these alterations, it is evident thas the want of fresh animal and fresh vegetable substances, the long continued use of the same kind of food, and that in insufficient quantity, together with the irregular manner of living, was amply sufficient, in this case, to determine the accidents observed; and doubtless the frequent occurrence of diarrhœa, by removing the healthy constituents of the blood, would greatly accelerate the results.

Treatment.—Here the indications are very evident. In the first place, improve the condition of the blood; secondly, encourage the free circulation in the skin, and favour its return from the inferior extremities. The first indication is fulfilled by attention to diet, which must consist of fresh meat and fresh vegetables, in order to increase the quantity of fibrin in the blood; lemon juice to destroy the too large amount of free alkali in the blood; and afterwards give iron to improve the condition of the globules, and render the blood more invigorating.

To fulfil the second indication, we employ warm baths, to soften the integuments and determine the blood to the surface, friction with almond oil, &c.; and for the obstruction in the venous circulation, elevation of the legs, and bandaging from the foot to the hip.

Prognosis—Dr. Elliotson observes that this disease is of a chemical nature, if any one be so. In one sense the constitution is not at all in fault; all the fluids and all the solids appear to be changed; but we have only to give a different chemical state to the body, and the disease is cured. This may be true in a great number of cases, but Professor Andral says that nothing is more difficult than the definite cure of those diseases in which the blood is robbed in a slow and spontaneous manner, either of its globules, or its fibrin. We know how easy are relapses in young chlorotic females, and how often the symptoms are long in being entirely removed. In persons of still more advanced age, who become spontaneously anæmic, the production of the globules is still more difficult to obtain. As to scurvy, if it arises from evident external causes, it generally yields readily, when these influences no longer exist; but if it comes on spontaneously, it will generally resist every possible means we may employ. Again, the same author adds, "I have seen scurvy cured, but I have also seen a great number of cases in which, although the symptoms appeared to improve very greatly at intervals, they never entirely disappeared, and after gradually increasing, finally terminated fatally." In the case before us, although the patient appears to be perfectly cured, yet Professor Piorry affirms, that if on his dismission he is not very circumspect,—if he is not allowed sufficient wholesome food, and employment in the open air, &c., it is very evident, on considering the age of the patient, and the length of time the disease has continued, that he will be liable to a speedy relapse.

Paris, April 26, 1847.

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, MAY 19, 1847.

It is with much satisfaction that we learn that Her Majesty's Government have consented to the appointment of a Select Committee of the House of Commons to investigate the subject of "Medical Registration and the state of the Law relating to the Practice of Medicine and Surgery" in this country. The second reading of Mr. Wakley's Bill, originally fixed for Wednesday, May 5th, and then for the following Monday, is again postponed to Monday, 31st, on which occasion will be brought forward a motion for referring the Bill to a select Committee.

Whatever views may be taken of the several provisions of the Medical Registration Bill, and of the manner in which it is proposed therein to carry out its objects, there can be no question that the two leading principles of the Bill,—1st the distinguishing of qualified from unqualified practitioners; and 2ndly, the giving to the qualified practitioner a general legal recognition, and sanction to practise, are equitable and sound, calculated to be of genuine service to the public, and deserving of the warm support of the profession. The inquiry into these questions cannot but be fraught with beneficial consequences, and we trust that no attempt which may be made in any quarter to shelve or otherwise defeat the motion, will be permitted to be successful.

Any equality of privilege actually possessed by, or proposed to be bestowed on, the entire profession, or any section of it, or corporate or

other body belonging to it, on the ground of equality of qualification must, under existing circumstances, be futile in the extreme. To look to England alone, what can be more heterogeneous as respects qualification, than the elements of which either of the Royal Colleges of Physicians and Surgeons are composed; or to take non-corporate bodies, than those of the Provincial Medical and Surgical Association, or of the National Institute of Medicine, Surgery, and Midwifery. Equality of qualification, were it attainable, could not be preserved for a single week; but a given sufficient amount of qualification is attainable, and ought to found the ground-work of all future admissions within the pale of the profession, while for the past, the possessers of genuine qualification, duly certified to by any British University, or corporate body empowered to grant licenses to practise, are entitled to be legally recognized as such, and registered as members of the profession, and of the several sections of it to which they may belong,—it being always to be borne in mind, that between the very lowest in point of attainments of any individual so qualified, and the highest in point of pretension of any of the unqualified mountebanks who live by the gullibility of the public, there is a vast and immeasurable distance, which ought to be distinctly marked.

Proceedings of Societies.

BATH PATHOLOGICAL SOCIETY.

First Meeting, October 5th, 1846, Mr. Norman in the Chair.

Case I.—*Injury of the head from a fall; insensibility coming on gradually, and death following in forty-eight hours after the accident; the right pupil dilated and immoveable. Dissection:—A large clot beneath the dura mater; a small coagulum on the right optic nerve after it leaves the commissure.*

Mr. Gore exhibited the brain of a woman who died in consequence of a fall on her head; the part of the head which received the injury was the right parietal protuberance. She remained conscious, and with the power of motion for some hours after the accident; insensibility gradually supervened, and she continued comatose until death, which took place forty-eight hours after the receipt of the injury. The right pupil was dilated and immoveable. On dissection after death a large coagulum, two or three ounces, was found beneath the dura mater, in the right parietal region; the precise source of the blood did not appear. On the right optic nerve, after it leaves the commissure, there was found a small coagulum. Mr. Gore remarked on the importance of one of the symptoms of this case, as guiding to a just diagnosis—namely, the consciousness of the patient continuing for some time after the accident, total insensibility then following, marking the gradual development of a compressing cause, which in such a case could be no other than hæmorrhage. The situation of the injury, and the absence of tenderness over the course of the middle meningeal artery, Mr. Gore considered sufficient to contraindicate operative interference.

Case II.—*Frequent vomiting, with pain referred to the region of the stomach, occurring at from two to three hours after taking food. Dissection:—Evidences of inflammation of the duodenum near the pylorus, and partial atrophy of both kidneys.*

Mr. Hunt exhibited part of the duodenum, including the pylorus, the kidneys, and part of the uterus, of a woman who had been delivered about ten days before death. She first came under Mr. Hunt's care in February, 1846, at which time her symptoms were, severe and constant vomiting, with pain referred to the region of the stomach, for the most part occurring at from two to three hours after taking food, with considerable emaciation. These symptoms continued more or less up to the period of death, which took place in September. On dissection, the mucous membrane of the duodenum near the pylorus was found much thickened, and admitted of being easily torn off. One of the kidneys was greatly atrophied, and the other slightly so, apparently having undergone granular degeneration in different degrees. The urine had not been examined. The uterus was merely exhibited in order to illustrate the condition of that viscus at the above mentioned period after delivery.

Case III.—*Frequent vomiting, with gradual emaciation; no pain, but some difficulty of swallowing. Dissection:—Soft cancer involving the cardiac orifice of the stomach.*

Mr. Norman exhibited the œsophagus and stomach of a man who had been for some months under his care, at first with symptoms somewhat equivocal in their nature, but for some time before death the existence of cancerous disease of the cardiac orifice of the stomach was diagnosed. When the patient first came under Mr. Norman's care, he was suffering from constant vomiting on taking food, attended with gradual emaciation. No tumour could be felt, and he suffered no pain. There was some difficulty in swallowing. A full-sized œsophagus bougie was passed, which met with some obstruction at the junction of the pharynx with the œsophagus; this, with the other symptoms, rendered the idea of stricture probable, which was further confirmed by finding that the passage of the instrument was attended with marked relief to the vomiting, and also to the difficulty of swallowing. Matters went on thus until within a month of the patient's death, when it was found that the bougie would no longer pass into the stomach, in consequence of obstruction at the cardiac orifice. On dissection after death, the lower end of the œsophagus and the cardiac end of the stomach were found involved in an extensive cancerous deposit, of the soft or encephaloid kind. The disease had not attacked any other organ of the body. The cause of the obstruction to the passage of the bougie at the junction of the pharynx and œsophagus, was found to be an ossified

condition of the thyroid cartilage, by which the œsophagus was pressed backwards, and on one side.

Second Meeting, November 2nd, 1846.

Mr. NORMAN in the Chair.

CASE IV.—*Injury of the spine from a fall; complete paralysis below the seat of injury; death on the eighth day. Dissection:—Fracture of the laminæ of the two last cervical and upper dorsal vertebræ; effusion of blood beneath the dura mater, and softening of the substance of the cord.*

Mr. Brown exhibited part of the spinal column and cord of a man who had died in consequence of an injury received by falling on the lower part of his neck, from a height of about seven feet. He was admitted into the hospital twenty-four hours after the accident, and died on the eighth day. On admission there was perfect paralysis of the lower extremities, both as regards sensation and motion; tickling of the soles of the feet did not induce any reflex action; he had lost all power over the bladder and rectum, so that the fæces passed involuntarily, and the urine was retained; about two quarts of highly alkaline urine was drawn off after his admission. Priapism in this case was a troublesome symptom, at times interfering with the introduction of the catheter. The breathing was altogether diaphragmatic; the intercostal muscles being quite paralysed; strong pressure over the seat of injury caused considerable pain. On dissection, there was found an oblique fracture extending through the laminæ of the two last cervical and upper dorsal vertebræ, the spinous process of the seventh cervical vertebra being detached at its junction with the laminæ; blood was effused, both external to, and beneath, the dura mater, and the substance of the cord was softened opposite the seat of injury. Mr. Brown remarked regarding priapism, which was present in this case, that on making inquiry of Dr. Tunstall, at the Bath Hospital, he found it to be a frequent and troublesome symptom in the cases of paraplegia which came under treatment in that institution.

CASE V.—*Scrofulous disease of the eye-ball, simulating malignant disease.*

Mr. Soden brought a child before the Society, for the purpose of exhibiting a peculiar pathological condition of one eye, in which the appearances presented were very much such as would lead to the idea of malignant disease of the eye-ball, but which in fact consisted of a scrofulous deposit in the iris, with a series of purple vesicles surrounding the choroid ligament.

CASE VI.—*General anasarca; albuminous urine. Dissection:—Granular kidney.*

Dr. Daniell exhibited a kidney in the second stage of granular degeneration, taken from the body of a young woman who had died universally anasarcous. The disease ran a short and rather acute course; the urine during the whole time was of low specific gravity and highly albuminous. On dissection, the cortical substance of the kidney was found thicker than natural, much blanched in colour, and studded throughout with very distinct yellow granulations; the tubular structure was free from deposit, and of natural colour; the whole of the abdominal viscera were much blanched in appearance.

CASE VII.—*Craniotomy in a case of deformed pelvis; a considerable portion of brain removed; the child cried after delivery.*

Mr. King related the circumstance of craniotomy having been performed in a case of deformed pelvis, a large portion of the child's brain being removed, and the head afterwards drawn down. The child, notwithstanding, cried after birth.

Third Meeting, December 7th, 1846.

Mr. NORMAN in the Chair.

CASE VIII.—*Dysentery and abscess of the liver. Dissection:—Sloughing of the mucous and muscular coats of the colon; several large abscesses in the liver.*

Dr. Budd exhibited the colon and liver of a man who died of dysentery and abscess of the liver. Drawings of the recent parts were also exhibited. The patient had been a railway labourer, was a finely-formed athletic man, 28 years of age. Before his illness he had enjoyed robust health. He was admitted into the hospital labouring under severe and clearly-marked symptoms of dysentery, and subsequently abscess of the liver was diagnosed. On dissection after death, the whole of the colon was found in a state of intense inflammation, the mucous and muscular tissues in a sloughy condition, with two large ulcerated openings into the peritoneal cavity, one situated in the sigmoid flexure, and the other higher up. The liver contained several large abscesses. Dr. Budd remarked on the comparative rareness of such severe dysenteric disease in this country, and also called attention to the case as an example of abscess in the liver following the formation of pus in the colon; the previously robust and healthy condition of the man, with the laborious occupation he had followed, precluding, in Dr. Budd's opinion, the idea that the liver disease had preceded the dysentery.

CASE IX.—*Abscess of the Liver.*

Mr. Boult read the history of a case of primary abscess in the liver. The abscess was punctured and the patient recovered. This paper appeared in full in the first number of this Journal for the present year.

CASE X.—*Obstinate constipation and death; morbid appearances in the small intestine unsatisfactory.*

Mr. Field exhibited a portion of the ileum taken from the body of a man who died under the following circumstances:—He complained of pain in the left iliac region, not severe, nor increased by pressure; his bowels were obstinately constipated, and resisted all attempts to promote their action, until within a short period of death, when they acted freely. He was bled; the blood was slightly buffed. On dissection, the seat of the disease was found to be a portion of the ileum some distance above the caput cæcum; that portion of the small intestine above the disease presented nothing remarkable in appearance, whilst the implicated portion was considerably dilated; the mucous coat much injected, and of a dark colour; the

peritoneal covering was natural. Mr. Field remarked on the obscurity of this case, both as regards its symptoms and *post-mortem* appearances, and questioned whether it ought to be considered as a case of ileus, as described by Dr. Abercrombie, or one of inflammation, affecting the mucous and muscular coats, without involving the peritoneal.

CASE XI.—*Symptoms of inflammatory fever, with more or less of dyspnœa; rather sudden death. Dissection.—Fluid in the serous cavities; some degree of obstruction of the left side of the heart.*

Mr. Bush exhibited a heart taken from the body of a young man, about 24 years of age, who applied to him some weeks before death, sufferiug under symptoms of asthma; he was afterwards attacked with inflammatory fever, from which he seemed to be recovering, when he fell on getting out of bed, complained of much pain, and died in twenty minutes. On dissection, both lungs were found much congested, and both pleural cavities contained a quantity of bloody serum, as did also the pericardium. On cutting across the aorta, a quantity (probably one or two drachms,) of pus-like matter flowed out, along with some fluid blood; on laying open the left ventricle, there was found a rather firm fibrous band, extending across the base of two of the aortic valves, in such a way as must, to a certain extent, have impeded the flow of blood into the aorta; in other respects the heart was natural.

CASE XII.—*An example of extensive intus-susception.*

CASE XIII.—*A case of extreme cirrhosis of the liver.*

Dr. Budd exhibited a preparation and drawings of the parts when recent, of a case of intus-susception, when the whole of the transverse colon, even to its junction with the ileum, had passed into the sigmoid flexure, symptoms of strangulation came on, and death followed in seven days. Also a case of extreme cirrhosis of the liver. The preparation and drawings were exhibited. There was not much known concerning the history of the man from whom the specimen was taken, except that he had been a large consumer of raw spirit. As to the nature of cirrhosis, Dr. Budd remarked that it consists essentially in inflammation and thickening of the capsule of Glisson, set up in consequence of the circulation through the liver of the alcoholic fluid. This gives rise to pressure on, and atrophy of, the vascular structure of the organ, leading to imperfect nutrition, by pressure on its nutrient vessels; ascites, by pressure on the portal system; and occasionally jaundice, from the same cause acting on the bile-ducts.

SHEFFIELD MEDICAL SOCIETY.

Sixth Session, Thirteenth Meeting, March 18th, 1847.

The President, Mr. TURTON, in the chair.

The President exhibited a portion of the left superior maxilla of a girl, aged 8, which had exfoliated as a consequence of fever, of a typhoid character. In the treatment no mercury was used. The case terminated very well.

FATTY TUMOUR: ÆTHER-INHALATION.

Mr. H. Jackson exhibited a large tumour, removed from the arm of a farm-labourer, aged 66. Its existence had been detected accidentally ten years ago, and it was then as large as a hen's egg, and had gradually increased. It never has given him pain, but he had been alarmed by hæmorrhage taking place from the most depending portion of it on two different occasions within the last two years. It covered the brachial artery about two thirds of its course. The vapour of æther was used, and operated in two minutes. The patient complained of no pain. On cutting into the tumour it was found to be a fatty mass, having in its centre a small cavity about the size of a common nut, which was filled with light-coloured pus. The bleeding had taken place from a vein which had passed over a small ulcer, arising from the distention of the integument. The patient was doing well.

SCIRRHOUS BREAST: EFFECTS OF ÆTHER.

Mr. H. Jackson exhibited a scirrhous breast which he had removed from a woman, aged 55. The patient was a stout-looking woman, married, but had never borne children; of very irregular habits. The æther operated in three minutes, producing all the effects described as those of æther. The prostration was very extreme, and had continued so up to this, the fifth day. The patient had presented occasional symptoms of hysteria since the operation, but Mr. Jackson considered her to be in danger from the effect of the æther.

Mr. H. Jackson exhibited to the Society a working model of a grinding-wheel, exhibiting the means by which it was intended to carry off the particles of dust and steel in the process of grinding, and thereby diminish the danger attendant upon that trade. The model was constructed by the late J. H. Abraham, F.L.S., who had devoted a considerable portion of time to the subject; it is the property of the Literary and Philosophical Society of Sheffield.

PERITONITIS FOLLOWING FEVER: FÆCAL ABSCESS: INTERNAL STRANGULATION.

Mr. H. Jackson read a communication from Mr. W. C. Russell, of Bawtry, of the following case:—A boy, aged 15, presenting the strumous diathesis, was seized with fever, of a very low character, (then epidemic in the neighbourhood, and from which he with difficulty recovered,) on the 5th of November, 1845. On the 13th of January following, symptoms of peritoneal inflammation appeared, which gave way to treatment. On the 20th he complained of great pain and tenderness of the abdomen, which were quickly followed by tympanites. These symptoms gave way, and the abdomen became soft, but a circumscribed tumour, from four to five inches in diameter, remained situated midway between the superior spinous process of the ilium on the right side and the umbilicus. On the 29th an opening was made into the tumour, on which a quantity of very offensive gas escaped, followed by collapse of the tumour, and shortly afterwards by a copious discharge of pus, in which were some small particles of fæculent matter. The wound was kept open by a canula, and for several weeks an abundant

discharge continued; it healed, however, about the 1st of April. The boy rapidly improved in health, and went to work in the fields. In consequence of some protrusion at the cicatrix, an umbilical truss was applied, which answered the desired end. On the 27th of September he was suddenly seized with violent pain in the abdomen, vomiting and obstruction of the bowels. Treatment here completely failed. Little more than two ounces of fluid could be injected; opium appeared to palliate; the vomiting continued from the 27th; on the 30th it became stercoraceous, lumps of fæces the size of walnuts being ejected from the stomach. No evacuation having taken place from the 29th of September, on the 12th of October half an ounce of quicksilver was administered, but without any visible effect; the stercoraceous vomiting continued, accompanied by violent tormina and every indication of intus-susception. November 1st, the bowels began to act very freely, the quantity passed was enormous; there was no appearance of the quicksilver; the vomiting still continued. The boy lingered until November 13th, and then sank in a most extreme state of emaciation.

On inspection *post mortem*, numerous adhesions were found in every direction. The stomach small and its coats attenuated; it contained some small portions of fæculent matter; the mucous lining was ash-coloured but not ulcerated. The convolutions of the intestine were glued together, and from several points a fæculent discharge exuded. The mesenteric glands were much enlarged; two of them about the size of pigeon's eggs, were in an advanced stage of suppuration. On tracing the ileum from the jejunum to the extent of about twelve inches, it was found to terminate in a *cul de sac*, formed by a strong band of false membrane, an inch and a half in length, firmly attached at one point to the jejunum, and at the other to the descending colon, preventing peristaltic action, and actually strangulating the bowel. This portion of intestine was almost black, as if in a state of gangrene, but the coats were very firm and the quicksilver had accumulated here. At this point an abscess had formed implicating the sigmoid flexure of the colon as well as the ileum. The abscess having burst some days before death, will account for the emptying of the larger intestines. The pelvic portion of the ileum was almost embedded in enlarged mesenteric glands in a state of suppuration. The intestine including the jejunum, and about twelve inches of ileum, had become so much thickened that it resembled the structure of the rectum, while the ascending and transeverse colon had become so much attenuated as to resemble ileum. The gall-bladder was of inordinate size, and contained four ounces of thick dark-coloured bile. Nothing remarkable in the other viscera.

CHRONIC INFLAMMATION OF THE CÆCUM AND COLON.

Mr. Storrs, of Doncaster, read a paper on chronic inflammation of the mucous membrane of the cæcum and colon. The disease which he was anxious to describe, differed from dysentery, inasmuch as it is unattended with the same amount of constitutional disturbance; it is a chronic form of disease, the constitutional symptoms of which are in general very slight, and only become aggravated through neglect, or harsh and improper treatment. The symptoms of the slow form of inflammation of the textures in question, are often so slight as to be at first unobserved. There is occasional discharge of mucus from the bowels, without any purging; the stools are often perfect in form and consistence, but partially coated with mucus, or followed by flakes of mucus, which come away without any straining or tenesmus; occasionally the mucus will appear in small lumps, not unlike lumps of fat, at other times it assumes the form of the finger of a glove. This mucus is quite uncoloured, either by the fæces or by the admixture or infiltration of blood; sometimes there are scybalæ discharged with the mucus, but more frequently the stools are of the natural appearance and consistency. The medical man is seldom consulted at this early stage of the disorder; soon, however, the symptoms are sufficiently marked to call for medical aid. Then slight tenderness on pressure is detected in the cæcal region, extending upwards towards the liver and duodenum, and downwards towards the pelvis and pubes; the pulse is soft and weak, and slightly quickened; the tongue is somewhat coated, and more or less red at the tip and edges; the skin, especially of the hands, is moist, soft, porous, and indicative of a considerable degree of general debility; the countenance and appearance of the lips and eyelids, especially in females, is more or less anæmic; the nervous system is highly irritable, and the action of the heart is increased on slight exertion. Sometimes there is more or less spasmodic pain generally throughout the abdomen, and not unfrequently the symptoms are ascribed to an aggravated state of chronic dyspepsia; occasionally the stools are very fœtid, dark, and disagreeable. As the inflammatory action of the intestine advances, there is increased abdominal tenderness, and the symptoms then assume a character produced by a mixture of nervous and inflammatory disturbance. The predisposing cause of the disease, Mr. Storrs considered to be a relaxed and atonic state of the vascular system, and a highly irritable state of the nervous; the exciting causes,—torpor of the bowels, scybalæ, drastic purgatives, and repeated errors of diet. It may not unfrequently be connected with suppressed or deficient menstruation, suppressed hæmorrhoidal discharges, and tight lacing. It is well to examine the stools in all cases of dyspepsia, as the condition above described may thus be detected when little suspected. When discovered, all drastic purgatives are to be avoided. A few leeches, followed by blisters, are advisable, when there is any abdominal tenderness, due care being taken to husband the powers of the patient, which are soon depressed in this form of disorder. When the inflammatory action is sufficiently subdued, the tone of the system is most rapidly restored by a continued exhibition of the citrate of iron, this preparation being generally preferred by the patient. Mr. Storrs strongly recommended iron in some form or other, believing it to produce, not only a general and constitutional effect, but also some degree of local power as an astringent.

Smart doses of calomel and scammony, followed by castor oil, are useful when scybalæ are suspected; in other cases, drastic purgatives should be avoided, and mild injections substituted for them. When the inflammatory symptoms do nor yield to leeches and blisters, the Linimentum Hydrargyri is useful.

Mr. Storrs then detailed several cases illustrative of the condition above described.

Miss W., a delicate lady, about 28 years of age, had suffered for a considerable time from indigestion, pain at the epigastrium after eating, and loss of appetite, and which continued in spite of treatment. After a time great tenderness on the right side of the abdomen came on, accompanied now and then with severe spasmodic pain; the pulse was quick and soft; the palms of the hands wet and clammy; sometimes very hot, but more frequently cold. As the disease advanced severe faintings and hysterical symptoms came on; the countenance, from being florid, became sallow, and the lips pale, and there existed a high state of irritability and debility of the whole system. On inspecting the motions a large portion of mucus about six inches in length, and still preserving the form of the bowel, though collapsed, was detected; the stools were otherwise healthy. Leeches and blisters were successively applied to the tender portion of the abdomen, and when the inflammatory symptoms were sufficiently subdued by these means and gentle aperients, a preparation of iron was given for some time, under which the patient gradually, though slowly, recovered. Several portions of mucus were voided, sufficiently consistent to retain the form of the bowel, after the one first observed, but this discharge quite ceased after the iron had been administered for a short time. There was some degree of irregularity in menstruation both before and during the attack of the disorder.

The other cases detailed were very similar to the one just related. Mr. Storrs concluded his paper by remarking on the frequency of the disorder, particularly in delicate females and amongst the poor and ill fed, and reiterated his conviction of the value of iron as a remedy in the disease. Though he had had no opportunity of making any *post-mortem* examinations in this disease, he considered it far from improbable that many of the disorganizations of the cæcum and colon, such as ulceration, thickening, and contraction of tunics, are referable to a long continuance of the condition described.

A CASE IN WHICH THE DIPLOMA OF THE COLLEGE OF SURGEONS WAS LATELY OBTAINED UNDER FALSE PRETENCES, AND OF WHICH THE PARTY WAS DEPRIVED AFTER A DUE INVESTIGATION.

TAUNTON AND SOMERSET BRANCH OF THE PROVINCIAD MEDICAL AND SURGICAL ASSOCIATION.

At a Council meeting held on Thursday, May 6th, 1847,

Resolved,—

"That a verbatim copy of the whole of the correspondence connected with James Dore Blake's diploma be forwarded for insertion to the Editor of the *Provincial Medical and Surgical Journal*."

"FRANCIS HENRY WOODFORDE, M.D.,
President.

"CHARLES HAYES HIGGINS, F.R.C.S.,
Honorary Secretary.

"Taunton, May, 1847."

CORRESPONDENCE.

Taunton, July 8, 1846.

Sir,—I am instructed by the members of the Taunton and Somerset Medical Association to forward the inclosed memorial to the President and Council of the Royal College of Surgeons of England through you.

I am, Sir,
Your obedient servant,
CHARLES HAYES HIGGINS,
Honorary Secretary.

To Edmund Balfour, Esq., Secretary to the Royal College of Surgeons.

Taunton, June 25, 1846.

To the President and Council of the Royal College of Surgeons of England.

Gentlemen,—We, the undersigned, being Fellows and Members of the Royal College of Surgeons of England, residing in the town and neighbourhood of Taunton, and being desirous of upholding the dignity and respectability of our College, feel it our duty to draw your attention to the fact, that a Mr. James Dore Blake, who until May 1845, and for a period of about thirteen years previously, was a retail pastry-cook and confectioner in that town, has lately obtained the diploma of the College of Surgeons; and to represent to the Council, as well the scandal to our College which such a circumstance is calculated to produce, as the extreme hardship to those members of the College, who by the regulations of the College have been obliged to go through a lengthened period of regular study, and a great deal of expense, in order to obtain a diploma which has been granted to a retail shopkeeper of thirteen years' standing, after a period of only one year of alleged study, and at a comparatively trifling outlay of money.

And we farther call upon you, the President and Council of our College, to prosecute such inquiries into the testimonials and certificates produced by Mr. James Dore Blake, before the Court of Examiners, as shall place the matter in a position satisfactory to all concerned in upholding the honor and credibility of the College of Surgeons.

We have the honor to subscribe ourselves,
Your obedient servants,

ROBERT RUSSEL SEWELL, Bridgewater.
FRANCIS HENRY WOODFORDE, M.R.C.S.E., Taunton.
WM. M. KELLY, M.R.C.S.E., Taunton.
GEORGE CORDWENT, M.R.C.S.E., Taunton.
JOHN PRANKERD, M.R.C.S.E., Langport.
H. W. RANDOLPH, M.R.C.S.E., Milverton.
HENRY FOOT LING, M.R.C,S.E., Stogumber.

CHARLES HAYES HIGGINS, F.R.C.S.E., Taunton.
CHARLES HUGO, M.R.C.S.E.
JAMES DYER, M.R.C.S.E., Creech.
WILLIAM BEADON, M.R.C.S.E.
WILLIAM CATLETT, M.D., M.R.C.S.E.
HENRY ALFORD, F.R.C.S.E.
FRANCIS WELCH, F.R.C.S.E.
FRANCIS FOSTER, M.R.C.S.E.
HENRY LIDDON, M.R.C.S.E.
JOHN LIDDON, F.R.C.S., Eng.
C. H. CORNISH, F.R.C.S., Eng., Wellington.
WILLIAM COLLARD PYNE, M.R.C.S.E., Wellington.
W. C. PYNE, Jun., M.R.C.S.E., Wellington.
ALBERT LANGLEY, M.R.C.S., Eng.
GEORGE KIDGELL, M.R.C.S.E., Wellington.

Royal College of Surgeons of England,
July, 1846.

Sir,—I have laid before the Council of this College the memorial enclosed in your letter of the 8th instant, signed by five (four,)* Fellows, and eighteen other Members of the College, residing in the town and neighbourhood of Taunton, drawing the attention of the Council "to the fact, that a Mr. James Dore Blake, who until May, 1845, and for a period of about thirteen years, was a retail pastry-cook and confectioner in that town, has lately obtained the diploma of the College of Surgeons," and calling upon "the Council to prosecute such enquiries into the testimonials and certificates produced by Mr. James Dore Blake, before the Court of Examiners, as shall place the matter in a position satisfactory to all concerned in upholding the honor and credibility of the College of Surgeons." And I am directed by the Council to transmit to you copies of the several certificates handed in by Mr. Blake, prior to his admission to examination for the diploma of this College.

I am, Sir,
Your most obedient servant,
EDMUND BALFOUR, Secretary.

Charles Hayes Higgins, Esq.,
Honorary Secretary.
Taunton and Somerset Medical Association.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

CERTIFICATES OF EDUCATION.

Preliminary Education

"If the candidate began the study of his profession previously to his attendance on lectures or hospital practice, let it be here stated, and whether the same was by an apprenticeship, or in what other manner."

[*Printed Certificate filled up.*]

"It is hereby certified, that Mr. J. D. Blake has been employed in the study of medicine during the last ten years, about five of which he acted with me, and under my directions, and to my perfect and entire satisfaction.

"Dated 2nd day of April, 1845.

"Signed W. H. TROTMAN, Surgeon, R.N."

(See also letters appended.)

Anatomy and Physiology.

"This and the following certificate are divided into two parts, as the regulations of the College require, that the attendance should have been during two distinct Anatomical Sessions, of six months each, and comprising at least 140 lectures, and 100 demonstrations."

"It is hereby certificed, that Mr. Jno. Dore Blake very diligently attended my lectures on Anatomy and Physiology, at the School of Medicine, Charlotte Street, Bloomsbury, from the 1st day of May, one thousand eight hundred and forty-five, to the 1st day of August, one thousand eight hundred and forty-five, and that this course or session included seventy lectures.

"Dated 1st day of April, 1846.

"Signed G. D. DERMOTT."

"It is hereby certified, that Mr. Jno. Dore Blake very diligently attended my course of lectures on Anatomy and Physiology at the school of Charlotte Street, Bloomsbury, from the 1st day of October, one thousand eight hundred and forty-five, to the 1st day of April, one thousand eight hundred and forty-six, and that this session included 142 lectures.

"Dated 1st day of April, 1846.

"Signed G. D. DERMOTT."

Demonstrations and Dissections.

"It is hereby certified, that Mr. Jno. Dore Blake very diligently attended my Anatomical Demonstrations at the School of Medicine, Charlotte Street, Bloomsbury, from the 1st day of May, one thousand eight hundred and forty-five, to the 1st day of August, one thousand eight hundred and forty-five; that this session included fifty demonstrations, and that he diligently dissected during the same period.

"Dated 1st day of April, 1846.

"Signed G. D. DERMOTT."

"It is hereby certified, that Mr. Jno. Dore Blake very diligently attended my Anatomical Demonstrations at the School of Medicine, Charlotte Street, Bloomsbury, from the 1st day of October, one thousand eight hundred and forty-five, to the 1st day of April, one thousand eight hundred and forty-six; that this session included upwards of 100 demonstrations, and that he diligently dissected during the same period.

"Dated 1st April, 1846.

"Signed G. D. DERMOTT."

Surgery.

"This certificate also is divided into two parts, as the regulations of the College require that the attendance on surgical lectures should have been during two distinct periods or seasons, each comprising not less than sixty lectures.

"It is hereby certified, that Mr. Jno. Dore Blake very diligently attended my lectures on Surgery at the School of Medicine, Bloomsbury, from the 1st day of May, one thousand eight hundred and forty-five, to the 1st day of

* The number of Fellows appears to be five, from the list of signatures.—[Ed.]

August, one thousand eight hundred and forty-five; and that this course included forty lectures.

"Dated 1st day of April, 1846.

"Signed G. D. DERMOTT."

"Mr. J. D. Blake also very skilfully performed many of the capital surgical operations on the dead body under my superintendance."

"It is hereby certified that Mr. Jno. D. Blake very diligently attended my lectures on Surgery, at the School of Medicine, Bloomsbury, from the 1st day of October, one thousand eight hundred and forty-five, to the 1st day of April, one thousand eight hundred and forty-six; and that this Session included eighty lectures.

"Dated 1st day of April, 1846.

"Signed, G. D. DERMOTT."

Practice of Medicine

"Required to occupy a period of six months, and to comprise not less than sixty lectures."

"It is hereby certified that Mr. J. D. Blake very diligently attended my lectures on the Practice of Medicine, at the School of Medicine, Charlotte Street, from the first day of October, one thousand eight hundred and forty-five, to the first day of April, one thousand eight hundred and forty six; and that this course included 100 lectures.

"Dated 1st day of April. 1846.

"Signed, J. C. B. ALDIS, M.D."

Chemistry

"Required to occupy a period of six months, and to comprise not less than sixty lectures."

"It is hereby certified that Mr. James D. Blake attended my lectures on Chemistry, at the School of Medicine and Surgery, Charlotte Street, from the first day of October, one thousand eight hundred and forty-five, to the first day of April, one thousand eight hundred and forty-six; and that this course included sixty lectures.

"Dated 1st day of April, 1846.

"Signed, JOHN RYAN."

Midwifery

"Required to occupy a period of six months, and to comprise not less than sixty lectures."

"It is hereby certified that Mr. James D. Blake, attended my lectures on Midwifery, at the School of Midwifery, Russel Place, from the first day of May, one thousand eight hundred and forty-five, to the last day of December, one thousand eight hundred and forty-five; that this course included upwards of one hundred lectures, and that he has attended several midwifery cases under my direction.

"Dated 13th day of February, 1846.

"Signed, J. H. DAVIS."

Botany

"Required to occupy a period of three months, and to comprise not less than thirty lectures."

"It is hereby certified that Mr. J. D. Blake has diligently attended my lectures on Botany at the School of Medicine, Charlotte Street, from the fifth day of May, one thousand eight hundred and forty-five, to the 24th day of July, one thousand eignt hundred and forty-five; and that this attendance included thirty lectures.

"Dated 29th day of July, 1846.

"Signed B. CLARKE."

Materia Medica

"Required to occupy a period of three months, and to comprise not less than thirty lectures."

"It is hereby certified that Mr. James Dore Blake, attended my lectures on Materia Medica, at the School of Medicine, Charlotte Street, Bloomsbury, from the 2nd day of October, one thousand eight hundred and forty-five, to the 1st day of April, one thousand eight hundred and forty-six; and that this course included eighty lectures.

"Dated 1st day of April, 1845-46.

"Signed GEO. SMITH, M.D."

Hospital Surgical Practice.

"This certificate is divided into two parts, in case the attendance should have been at more than one Hospital, or at the same Hospital, but not during consecutive periods."

"We hereby certify that Mr. James D. Blake attended the Surgical practice of University College Hospital from the 1st day of May, one thousand eight hundred and forty-five, to the 1st day of May, one thousand eight hundred and forty six."

"Dated 1st day of May, 1846.

"Signed, ROBERT LISTON.

"W. Long." "R. QUAIN,

"Surgeons to the Hospital."

Certificate of Age.

"In the event of much difficulty or expense in obtaining the certificate of age on this sheet, it may be procured separately and appended thereto."

Declaration.

"This declaration to be signed by the candidate at the College, in the presence of the Secretary or other officers."

"I, James Dore Blake, candidate for the diploma of the College of Surgeons of England, do hereby solemnly and sincerely declare, that I am twenty-two years of age;—that I have been engaged during five years in the acquirement of professional knowledge;—that I have regulalry attended the hospital practice, and the several courses of lectures required by the regulations of the College;—and that the foregoing certificates are in every respect correct and true.

"JAMES DORE BLAKE.

"Dated this 4th day of May, 1846.

"Witness H. P. Gregg."

"Taunton, Feb. 20, 1846.

"I hereby certify that Mr. James D. Blake, of Taunton, was born in Salisbury, on the 18th day of November, one thousand eight hundred and five.

"JAMES BLAKE."

Memoranda of additional Certificates, produced in testimony of an extended Professional Education.

"I certify that Mr. James Dore Blake has skilfully performed many of the principal surgical operations

during the session last past, and terminating this present month.

[illegible] of Medicine, Bloomsbury,

"April 29, 1846.

"G. D. DERMOTT."

[*Schedule according to the regulations of March*, 1835.]

"Edm. Balfour, Sec.

"College of Surgeons, 2nd June, 1846.

Private Certificates in the form of Letters, forwarded from the College of Surgeons.

(Copy.)

"I hereby certify that Mr. J. D. Blake has been employed in study and practice of medicine during the last ten years, about five of which he acted with me and under my direction, and to my perfect and entire satisfaction.

"W. H. TROTMAN, Surgeon, R.N.

"Bristol, 2nd April, 1845."

(Copy,)

"Oakhills, Taunton, Somerset,

"April 20th, 1845.

"This is to certify that Mr. James D. Blake has for many years to my knowledge been studying medicine as an amateur, and for several years past in the profession as an assistant and practitioner.

"HENRY SULLY, M.D. to his Majesty the King of Hanover."

(Copy,)

"This is to certify that Mr. J. D. Blake, of Taunton, Somerset, has been for many years a student of medicine and surgery, for which he has a rare natural aptitude; that he was for some years under the direction and superintendence of a qualified practitioner; and moreover that he has been actually pursuing the practice of medicine for several years past.

"C. D. J. LOWDER, M.D.,
Physician to the Bailbrook Lunatic Asylum.

"Sion Lodge, Bath, December 3, 1848."

(Copy,)

"I have great pleasure in testifying that I have known Mr. J. D. Blake for several years, during which time he has been studying medicine, and practising the same.

"I consider him to have a *peculiar aptitude* for this branch of science, and I should put myself under his care, (and indeed have consulted him,) with the greatest confidence.

"J. W. WELLESLEY.

"Sheffield, November 13, 1845."

(Copy.)

"I hereby certify that Mr. James Dore Blake has unceasingly and most diligently attended my lectures during the summer of 1845, commencing on the 1st day of May last, and terminating in the latter end of the July following.

"That he has also very diligently dissected during the above period, and performed under my superintendence, many of the capital surgical operations.

"That he is also attending with the strictest diligence and regularity, the present winter courses now delivered at the Charlotte Street School of Medicine.

"G. D. DERMOTT.

"Feb. 9th, 1846, Bedford Square."

(Copy.)

"This is to certify that Mr. James Dore Blake has been in very regular attendance on the Hospital-practice and Clinical Lectures at the Institution, since May, 1845.

"RICHARD QUAIN, M.D.,

"House Physician.

"University College Hospital.

"Feb. 7th, 1846."

(Copy.)

"University College, 6th Feb., 1846.

"I certify that Mr. J. Dore Blake, has been a diligent attendant at the Hospital during the time he has been a pupil of the Hospital.

"R. QUAIN."

MEMORIAL SECOND.

To the President and Council of the Royal College of Surgeons of England.

Gentlemen,—Some time since, a memorial signed by four Fellows and nineteen other Members of the College of Surgeons was presented to you, touching the diploma of a Mr. James Dore Blake, for many years and until May, 1845, a retail shopkeeper, &c., in the town and neighbourhood of Taunton, Somerset. In reply to this memorial you were pleased to transmit through the Secretary of the College, authentic copies of the testimonials and certificates, in consideration of which Mr. Blake was admitted to an examination, and subsequently obtained from you a diploma.

Having given these testimonials and certificates full consideration and a careful examination, we, your memorialists, beg to submit, that in *three particulars* they are at variance with the regulations and requirements laid down by the College authorities for the observance of candidates of Mr. Blake's (supposed) standing; and we beg respectfully to call your attention to this circumstance, believing as we do that it is calculated to throw great discredit upon our own diplomas, and to prejudice the respectability of our College.

By the regulations of the Council respecting the professional education of candidates for the diploma, dated March 14th, 1835, candidates are required "to bring proof," amongst other matters, of having been engaged five years in the acquirement of professional knowledge; of having studied anatomy and physiology by attendance on lectures and demonstrations, and by dissections, *during two anatomical seasons.**

It is moreover stated, that "certificates will not be received on more than two branches of science, from one and the same lecturer; but anatomy and physiology, demonstrations and dissections, materia medica and botany, will be repectively considered as one branch of science."

Now, upon referring to Mr. Blake's certificates, we find the following points upon which the regulations of the College appear to have been avoided or neglected:—

And first, as to certificates of the period or duration of professioual education, we can discover only certain loose letters from various persons, referring to a period

* An anatomical season is understood to *extend from October to April inclusive, and to comprise at least* 140 *lectures on Anatomy and Physiology, and at least* 100 *demonstrations, &c.*, exclusive of dissections, of which distinct certificates are required.

of about ten years; whereas the College authorities require that it should be stated "whether" such professional education "*was by an apprenticeship, or in what other manner.*" And on this point we beg farther again to draw your attention to the fact, that from the year 1830, to the 1st of May, 1845, Mr. Blake was actively engaged as a retail tradesman, his career during that time having been as follows:—

From 1830, or thereabouts, until December, 1839, Mr. Blake was *personally* engaged as a retail pastry-cook, in the town of Taunton. At that date he embarked in co-partnership with a Mr. Richards, of the same town, in an iron foundry, taking an active share in his new business. From Mr. Richards Mr. Blake separated, somewhere about March, 1841, when he opened a pastry-cook's shop in the city of Bristol, where he remained until September, 1842, combining with the duties of his shop the study of homœopathy, under a Mr. Trotman, an homœopathic practitioner in that city, and from whom a certificate was received at the College, as proof of Mr. Blake's professional education. From September, 1842, to December, 1843, Mr. Blake was occupied in smelting iron ore for Sir Thomas Lethbridge, residing in the immediate neighbourhood of Taunton. And finally, in December, 1843, or January, 1844, he returned to Taunton, having purchased the business of a Mr. Hitchcock, a retail pastry-cook, and in which business he was constantly and personally engaged, until May, 1845, combining, as at Bristol, with the duties of his shop, the study and practice of homœopathy. In May, 1845, he removed to London, and on the 8th of May, 1846, he obtained his diploma, and is now a professed homœopathic practitioner at Taunton.

In the second place we find that instead of two anatomical seasons, each extending "from October to April, inclusive," and comprising at least 140 lectures, 100 demonstrations, &c. &c. Mr. Blake's certificates only shew attendance on the required studies during one winter season, of 140 lectures, and one summer season of three months, comprehending only 70 lectures, on anatomy and physiology; and one winter season of demonstrations, of 100 demonstrations; and one summer ditto, of 50 demonstrations.

And lastly, we find that Mr. Blake has been permitted to hand in certificates of lectures on *three distinct* branches of science, delivered by one and the same person, viz., on anatomy and physiology,—on demonstrations and dissections, and on surgery.

Having pointed out these circumstances, we beg to commit the matter into your hands, trusting that you will cause such inquiries to be instituted, as in the words of our former memorial, "shall place the matter in a position satisfactory to all concerned in upholding the honour and credibility of the College of Surgeons."

Signed by desire and on behalf of the former Memorialists and of the Members generally of the Taunton and Somerset Branch of the Provincial Medical and Surgical Association.

FRANCIS HENRY WOODFORDE,
M.D., M.R.C.S., President.

CHARLES HAYES HIGGINS, F.R.C.S.E.,
Honorary Secretary.

Taunton, November 12th, 1846.

No reply having been received to the second memorial, the following letter was addressed to the authorities of the college:—

To the President and Council of the Royal College of Surgeons of England.

Gentlemen,—We are instructed by the members of the Taunton and Somerset Branch of the Provincial Medical and Surgical Association, to draw your attention to their memorial bearing date November 12th, 1846, and referring to the diploma of a Mr. James Dore Blake, until very lately a retail shopkeeper, and now an homœopathic practitioner in the town of Taunton.

And we are farther directed to enquire whether any, and what answer may be expected to the above memorial.

Signed, FRANCIS HENRY WOODFORDE,
M.D., &c., President,
CHARLES HAYES HIGGINS, F.R.C.S.E.,
Honorary Secretary.

Taunton, December 15th, 1846.

To F. H Woodforde, M.D., and C. H. Higgins, Esq.

Gentlemen,—I have received your letter of the 15th instant, relating to a memorial on the subject of the diploma granted to Mr. James Dore Blake, and inquiring whether any and what answer may be expected to that memorial.

I beg to inform you, that the earliest opportunity was taken of laying that memorial before the Council, who are now engaged in the consideration of the subject, regarding it as one of great importance, and requiring full investigation, which they are determined to follow up with as little delay as possible.

I have the honor to remain,
Gentlemen,
Your very obedient servant,
WILLIAM LAWRENCE.

Royal College of Surgeons,
Lincoln's Inn Fields.

Royal College of Surgeons of England,
29th April, 1847.

Sir,—By direction of the Council of this College, I transmit to you copies of resolutions of the Council, on the 27th instant.

I have the honor to be,
Sir,
Your most obedient servant,
EDMUND BALFOUR, Secretary.

Dr. Woodforde,
President of the Taunton and Somerset Branch of the Provincial Medical and Surgical Association.

At an extraordinary meeting of the Council of the Royal College of Surgeons of England, on Tuesday, the 27th of April, 1847,

Resolved—
That the following resolution of the 19th of April instant be confirmed.

"That it appears to the Council that Mr. James Dore Blake obtained his examination and letters testimonial by false statements and imposition, and

the Council does therefore recall such letters testimonial, and hereby declares the same to be void."

Resolved—

"That Mr. Blake be requested to return the diploma granted to him, he having ceased to be a member of this College."

EDMUND BALFOUR, Secretary.

CORONER'S INQUEST: ABUSE OF THE OFFICE OF CORONER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I should feel obliged if you would give the annexed account of an inquest, a place in the *Provincial Medical and Surgical Journal*. The coroner was several times requested to summon the medical attendant, as the jury could not determine what verdict they should return; but he refused doing so, alleging as his reason, "that the magistrates at Pontefract sessions had complained of the enormous amount of money expended in fees to medical witnesses."

Mr. John Barber, aged 73, cut his throat, at half past three o'clock, on the morning of the 25th March last. He went to bed the previous night apparently in his usual state of health; his housekeeper had noticed nothing unusual in his manner. She was awoke early in the morning by the noise of his falling upon the hearth; he had got out of bed, and cut his throat with a razor, whilst sitting in a chair, the chamber-pot, into which he had bled, containing, I should say, about four pints of blood. She aroused the neighbours; I was sent for, and immediately attended. There was very little hæmorrhage after my arrival. I dressed the wound, and with the administration of stimuli and proper nourishment, he rallied for a few days, but soon again fell into a state of collapse, which terminated fatally on the 8th of April. He thus survived the deed rather more than a fortnight.

The coroner, Mr. Wood, of York, was apprised of the circumstance, and an inquest was held on Saturday, the 10th of April, before Mr. Robinson, the deputy coroner. I attended, expecting that my evidence would have been not only necessary, but essential, in enabling the jury to arrive at some conclusion as to the state of mind in which the deceased was prior to, and at the time he committed, the act; but judge my surprise, when the coroner announced to me, even before a single witness was examined, that he could not grant me a summons, for the reason before-mentioned. It was very evident, to all the jury, as well as to myself, that the coroner had come determined not to allow the evidence of a medical witness; for although the jury several times expressed a wish that the surgeon who had attended the deceased should be examined, he remarked they would be compelled to do without him. He said they might ask him any question, but he could not allow him a fee; and as I did not feel disposed to give my professional attendance gratuitously in such a case, I left the room.

The only witnesses examined were his housekeeper and two of the neighbours. The jury were for some time divided in opinion, as to what verdict they should return; some maintaining there was no evidence of a deranged state of mind previously to his committing the deed, and others taking a more lenient and charitable view of the case, deeming the fact of a man committing suicide a sufficient proof of his insanity. Again medical testimony was solicited by the jury, and again refused by the coroner; when a verdict was at last extorted from them of "temporary insanity." I say *extorted*, for I am given to understand that many of them very ungraciously acceded to it, and have expressed themselves as being much dissatisfied with the conduct of the coroner.

The question naturally arises, what is the duty of the coroner? So far as I can learn, it extends to an examination of the circumstances connected with any case of sudden death, or death from violence; and he is to make this inquiry with the aid of a jury, summoned by him for the purpose. This jury are sworn "diligently to inquire, and true presentment make," how and in what manner the deceased came to his death; and what is more natural than, that a jury, wishing to discharge their important duties conscientiously, should wish to have all the assistance they can obtain, by the examination of such witnesses as they may deem essential to a full elucidation of all the facts bearing upon the case.

The principal points to be determined in this instance were—1st, was the wound inflicted by himself or some other person? 2ndly, if inflicted by himself, what was the state of mind in which he was at the time, and the previous state of health in which he had been? and lastly, did death ensue from the effects of the wound, or did the loss of blood tend to aggravate any disease previously existing? and all these important questions were determined without the evidence of a medical witness.

If such be the mode in which inquests are to be conducted, the sooner the farce is given up the better. Such proceedings, instead of rendering the coroner's court, as it ought to be, one of solemn inquiry and investigation, only tend to make their assembly a matter of form, and their verdict a nullity.

I am, Sir,

Your obedient servant,

H. STEAD, Surgeon,

Harrogate, April 15, 1847.

ON PROHYLACTIC REMEDIES.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

During the prevalence of typhus induced by the distress at present existing amongst the poor, it becomes an important question, whether, by any means other than the ordinary precautions, we can lessen liability to contagion? The martyrdom of members of our own and of the clerical profession in Ireland, and the extreme mortality amongst relieving officers in some parts of this country—Liverpool for example—invest the question with more than usual interest. With

respect to contagious fever, I think we may assume that the generality are now humoral pathologists. Can we so alter the condition of the blood artificially and safely as to diminish its proneness to take on the fever change? Animal poisons,—the only admissible one being vaccine virus,—alkalies, acids, quinine, steel, and mercury, are the principal and best-known remedies which modify the state of the blood for the time being.

On the employment of these for the purposes referred to, I have facts only with respect to iron and mercury. They are insufficient also to establish anything conclusive concerning the febrifuge powers of these, but they may prove suggestive to persons whose opportunities exceed my own. From December last to the present time, fever of an unusually falal type has occurred under my notice. Instances of direct contagion have been numerous. It has happened that patients taking steel, and others under the constitutional influence of mercury, have in no instance been affected. Since observing this, steel has been given to some with the intention of testing the view entertained. So far nothing has occurred to decide the question in the negative.

I attach little importance to the facts, they are too few to be deemed more than coincidences; but this cursory note may possibly serve to direct attention to a very grave and interesting subject.

I am, Sir,

Your obedient servant,

C. RADCLYFFE HALL, M.D.

Holmes Chapel, Cheshire.

April 30th, 1847.

INHALATION OF ÆTHER IN TRAUMATIC TETANUS: RECOVERY.

[We quote the following case as reported in the *Derby Mercury*, by Mr. C. A. Hawkesworth, Surgeon, Burton-on-Trent. It is to be regretted that Mr. Hawkesworth did not select some medical periodical as the medium of recording a case, which he states to be "the first of the kind within his knowledge."]

Charles White, about 12 years of age, resident in Stapenhill, near Burton-on-Trent, whilst in the act of chopping wood, struck the back part of his head with the hook he was using, and inflicted a very slight wound upon the scalp. For some days nothing occurred to attract notice, when, suddenly, symptoms of lock-jaw came on, with that peculiar and painful expression of the countenance so characteristic of this complaint; as also with rigid spasms of the muscles of the back and legs; to such a degree that the poor fellow might be truly said to rest upon the back of his head and heels. The usual remedies were tried without effect, until at last I determined upon giving the sulphuric æther a trial. I did so under the able guidance of my friend Mr. Murphy, dentist, Derby, whose well known skill and experience in the exhibition of the remedy render him fully qualified to use it, and in the presence of two friends who were kind enough to lend their assistance.

The narcotic effect was soon induced; in a few minutes the jaw fell, and the whole body assumed a relaxed and passive condition, so that the limbs could be moved about with the greatest ease. Now arose a moment of anxiety. As the boy recovers from the effects of the æther, and with returned sensibility, will the spasm and rigidity of muscles return?

For some time he remained quiet, and talked freely to those around him, and drank a little water. Gradually however, in the course of an hour, the spasm and rigidity returned; but certainly not so violently as before. Recourse was had a second time to the æther with good effect, and during every successive application, the patient became more relieved.

The boy is now well, and I think right to state, that, after the ffrst trial of the æther, his medicine consisted merely of an occasional aperient, which was not so much required as before the æther was used.

INHALATION OF ÆTHER IN SPASMODIC ASTHMA.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

Sir,

As I have not yet heard of æther being used in the treatment of asthma, I beg to state that I have used it in one case with the most perfect and instant success.

I am, Sir,

Your obedient servant,

W. CANTRELL.

Wirksworth, May 7, 1847.

THE REGISTRATION BILL.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

Sir,

I cannot but express my astonishment and regret on reading the resolutions published in the public papers by the *Council of the National Institute of Medicine*, against the provisions of *Mr. Wakley's Medical Registration Bill*; and for the following reasons:—

1st. The National Institute has invited every legally-qualified medical practitioner, however humble his qualification may be, to join that National Association, with the guarantee of being admitted to the full privileges of that class of practitioners, whenever they obtain their expected Charter.

2nd. By such a procedure, they have, nominally, given *a legal guarantee to practise*, to those practitioners who *do not possess* the License of the Apothecaries' Company.

3rd. On the face of their former proceedings, this *apparent generosity* to their pseudo-legalized brethren was hailed as an omen of that *good feeling* in the profession which it has *so long needed*; and in that way has increased their numbers and influence.

4th. The Council now come forward and say Mr. Wakley's Bill "*would permit persons possessing a single qualification, to practise the three branches of the profession*" notwithstanding they have *already registered such persons in their list.*

5th. The Council intimate that Mr. Wakley's Bill "*would give increased facilities for practising medicine to*

the chemists and druggists," when on the face of the Bill every possible means has been taken to *prevent* such *unjust* and *illegal interference.*

6th. As the Council of the National Institute know, as well as I do, that the provisions in Mr. Wakley's Bill are just what the profession have a wish and a right to require and demand—*i. e., a legal recognition to practise according to the value of their degrees obtained by examination after regular study;* and "that the *mere* certificate of the Registrar would *not* constitute the only title to practise," and a ready mode of securing those legal privileges they have obtained; preventing the lives of Her Majesty's subjects being tampered with by a host of ignorant quacks, they (the Council of the Institute,) cannot any longer expect the support of those medical practitioners who think rightly on the subject.

Your obedient servant,

E. J. SHEARMAN, M.D.

Rotherham, 11th May, 1847.

Medical Intelligence.

DEPUTATIONS TO SIR GEORGE GREY.

A Deputation from the Council of the National Institute of Medicine, Surgery, and Midwifery, consisting of Mr. Pennington, (President,) Mr. Thomas Martin, of Reigate, and Mr. Clifton, (Vice-Presidents,) Mr. Fuller, Mr. Bird, Mr. Ancell, Mr. Webster, Mr. Barnett, and Mr. Ross, (Secretary,) had an interview on Saturday, the 8th instant, with Sir George Grey, at the Home Office, on the subject of Medical Reform.

Deputations from the Royal College of Physicians, the Royal College of Surgeons, and the Society of Apothecaries, have also been received by the Right Honourable Baronet, at the Home Office.

ROYAL COLLEGE OF CMEMISTRY.

On Tuesday last His Royal Highness Prince Albert, accompanied by many noblemen and gentlemen, visited this College. His Royal Highness, attended by Professor Hoffman, proceeded at once to the laboratory, and inspected this and the other buildings, which are now completed. The visit to the laboratory was made while the students were at work, and the Prince appeared to take great interest in the various chemical processes which were being conducted by the students. The nature of these was fully explained to him by Dr. Hoffman.

His Royal Highness afterwards presided at a meeting of Council, at which a report was read on the completion of the laboratory, &c. The Institution is now stated to be in efficient working order. To the laboratory is attached a library and a theatre, in which chemical demonstrations are given by Dr. Hoffman. Among those present on this occasion were the Marquis of Northampton, Lords Fitzwilliam, Ducie, Ebrington, Newry and Morne, Sir James Clarke, Mr. Blackmore, Mr. B. B. Cabbell, and numerous friends of the Institution.—*Medical Gazette.*

SYDENHAM SOCIETY.

The Society held its fourth anniversary meeting on Saturday, May 1st, Dr. Latham in the chair. The report was read by the Secretary, Dr. Risdon Bennet, and represented the Society as in a flourishing condition. A complete edition of Hippocrates was stated to be in progress, as also a work on medical physiology, and another on medical ethics. A work on ancient medical Bibliography was also in progress. The Treasurer read his report, from which it appeared that there was a balance in hand of £700.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, April 30th, 1847:—J. H. Walker; T. S. Tearne; J. W. Williams; W. H. Cooke; W. Johnson; J. L. Green; R. S. J. Stevens; A. Adney; M. McDonnell; H. J. Barrett.

Gentlemen admitted Members on Friday, May 7th, 1847:—S. Melassez; J. Rushforth; G. Davis; T. Littleton; J. Prowse; D. Hope; H. Hart; R. Capron; G. Milburn.

Gentlemen admitted Members on Friday, May 14th, 1847:—A. N. Holmes; B. Button; F. Gardner; W. J. Anderson; F. C. Webb; J. Milner; W. Copeman; J. Lloyd; J. M. Shain; and W. Ellis.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates on Thursday, April 29th, 1847:—John Robert Humphreys, Shrewsbury; Richard Eliot West, Camelford; George Goforth Wyer, Swayfield, Lincoln; John Sebastian Helmcken; Richard Thomas Smith, London; Thomas Stillman, Steeple Ashton, Wilts; Henry Fisher, Devonshire.

Thursday, May 6th, 1847:—Richard Scott Boley, Bristol; John Rogers, Worcester; Edward John ap Ellis Eyton, Overton, Wales; William Butler, Stoke Newington; Henry Chawner; Robert Martin Craven, Hull; James Graham Nichol, Crook, Durham; George Frederick Burroughs, Sussex.

OBITUARY.

Died, April 23rd, at Oakhills, near Taunton, Henry Sully, M.D., a Member of the Provincial Medical and Surgical Association.

April 28th, aged 71, Robert Masters Kerrison, M.D., F.R.S., of Upper Brook Street, London.

May 3rd, aged 86, Mr. John Read, the inventor of the stomach pump and other apparatus used in medicine.

May 4th, at Tottenham, aged 79, John Ramsbotham, M.D.

May 4th, in Tavistock Row, Covent Garden, aged 52, J. P. Simon, M.D., formerly of Dublin.

May 5th, at Bath, Stewart Crawford, M.D.

BOOKS RECEIVED.

A Bill for the Registration of Qualified Practitioners, and for amending the Law relating to the Practice of Medicine, in Great Britain and Ireland.

Quarterly Return of the Health and Mortality in 117 Districts of England, for the Quarter ending March 31st, 1847.

The Construction and Government of Lunatic Asylums and Hospitals for the Insane. By John

Conolly, M.D., Fellow of the Royal College of Physicians of London, and Physician to the Middlesex Lunatic Asylum at Hanwell. With Plans. London: Churchill. 1847. pp. 188.

Report of the Cumberland Lunatic Asylum, at Dunston Lodge, Gateshead-on-Tyne, for the Year ending January 1, 1847. Edinburgh: Neill. 1847. 8vo., pp. 24.

The Surgeon's Vade Mecum. By Robert Druitt, F.R.C.S. Fourth Edition. London: Renshaw, 1847. pp. 620. Numerous Wood Engravings.

A History of the Discovery of the Application of Nitrous Oxide Gas, Ether, and other Vapours, to Surgical Operations. By Horace Wells, Hartford, U.S. 1847. pp. 25.

A Case of Large Secondary Prostatic Calculus, removed by Perineal Incision, &c. By T. Herbert Barker, M.B., (London), &c. (From the "Transactions of the Provincial Medical and Surgical Association)." Worcester: Deighton. 1847. 8vo. pp. 12.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

Gentlemen who have not yet paid their subscriptions for the current year, or who are in arrears, are requested to forward the amount due, either to the Secretary of the District in which they reside, or to the Treasurer or Secretary of the Association.

ROBERT J. N. STREETEN, Secretary.

ERRATA.

In the No. for April 7th, at page 187, col. 2, line 21, after "Infirmary," read 'a few days.'

For April 21st, Meteorological Journal, Mean of the External Thermometer, 9 a.m. at Romsey, for "25.21" read '35.21.'

METEOROLOGICAL JOURNALS FOR MARCH, 1847.

Kept at Sidmouth, by W. H. Cullen, M.D.; at Honiton, by Mr. Rogers; at Romsey, Hants by Francis Buckell, Esq., Surgeon.

	Sidmouth.		Honiton.		Romsey.
Mean of External Thermometer at 9 A.M.	44.17	.....	40.0	.....	42.92
. . . . . 9 P.M.	41.86	at 8 P.M.	40.0	at 9 P.M.	41.28
. . . the Maxima, ...	48.92	.....	47.0	.....	50.31
. . . . Minima, ...	36.28	.....	35.0	.....	35.06
Absolute Mean	41.37	.....	42.0	.....	42.68
. . . . . of ten preceding years.	40.97	.....	.	.....	.
Extreme highest on the 23rd	57.25	on the 22nd	57.0	on the 26th	61.00
. . lowest . . 11th	24.75	on the 11th	21.0	on the 11th	18.00
. . range	32.50	.....	36.0	.....	43.00
Greatest daily range	.	.....	.	on the 12th	25.50
Least	.	.....	.	on the 28th	4.00
Mean daily range	11.09	.....	11.	.....	15.55
Mean of Barometer at 9 A.M.	30.138	.....	29.51	.....	29.505
. . . . . 9 P.M.	29.196	at 8 P.M.	29.56	at 9 P.M.	29.477
Extreme highest on the 3rd	30.653	on the 3rd	30.20	on the 4th	29.010
. . . lowest on the 31st	29.650	19th & 20th	28.90	on the 28th	28.930
. . . range	1.003	.....	1.30	.....	1.080
Mean Dew-point, at 9 A.M.	38.28	.....	.	.....	.
. . . . . 9 P.M.	36.70	.....	.	.....	.
Number of days fine	12	.....	17	.....	9
. . . . . on which any rain fell .	13	.....	14	.....	14
. . . . . with snow or hail	3	.....		.....	3
. . . . . dull without rain . . .		.....	.	.....	5
Quantity of rain in inches	3.06	.....	.	.....	1.546
Prevailing Winds, ...	SE. N.	.....	SW. NE.	.....	SE. NE.

The Uckfield Journals will be given in the next Number.

TO CORRESPONDENTS.

Communications have been received from Mr. C. L. Prince; the Birmingham Pathological Society; Mr. W. Allison; Dr. Fife; Dr. Shapter; θ.; Dr. Shearman; the Sheffield Medical Society; Mr. T. Hunt; and Mr. F. Buckell.

It is requested that all letters and communications be sent to Dr. Streeten, Foregate Street, Worcester. Parcels and books for review, may be addressed to the Editor of the Provincial Medical and Surgical Journal, care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL
MEDICAL & SURGICAL JOURNAL.

ON THE RECENT OCCURRENCE OF SCURVY IN EXETER AND THE NEIGHBOURHOOD.

By Thomas Shapter, M.D.,

Physician to the Exeter Dispensary, and to the St. Thomas's Hospital, near Exeter, for Lunatics, &c.

During the last fifty years the occasional appearance of scurvy in prisons and more rarely in the British Navy, has from time to time excited deep attention, but of its occurrence as a disorder of the people little has been heard. It has so happened that very many cases have, within the last three months, come under my observation, and as the accompanying circumstances of the recurrence of this now rare disease are not devoid of interest, some brief record of them may be worthy of a passing notice.

Before I fully appreciated the presence of this disease, my attention had been arrested by the many cases, seeking relief at the City Dispensary, looking pale and sallow, and complaining for the most part of debility, faintness, and pains in the loins and limbs,—a class of symptoms I was at first inclined mainly to attribute to the effects of a long continuance of cold weather, depressing the powers of life, and inducing cold rheumatisms, in persons not enjoying, from pressure of the times, so full a diet as usual. The occurrence, however, of an undoubted case of scurvy of some severity, excited more particular observation, and a visit I was shortly afterwards desired to make to one of the Union Houses of the county, confirmed my opinion as to the true nature of these cases. In some, as will shortly be shown, the characteristic symptoms of scurvy were displayed in an aggravated form, while in others, though accompanied by much weakness and distress, they were only slightly developed.

I shall only briefly allude to the general nature of the symptoms which have marked these cases, dwelling a little more particularly on those accompanying the first ingress of the disease, as the spongy and swollen gum appears to me to have been erroneously estimated as amongst the primary and more obvious manifestations of scurvy. From what has recently passed beneath my observation, I am inclined to say there is a class of well-marked symptoms preceding this peculiar indication of the disease, and that the scurvy gum is rather to be regarded as an evidence of confirmed and advanced disorder.

The first or initiatory stage (and which may continue for a considerable period,) has appeared to me to be characterized by the general and usual indications of debility, with the addition of some few special symptoms;—there is complaint of the ordinary feelings of weakness, of listlessness, and a disinclination to exertion; the patient is nervous; has some little oppression of the breathing, with a feeling of faintness; is chilly; complains of slight superficial pains of the limbs, and more decided uneasiness across the loins; the countenance is pale and sallow; the lips are pale, and the gums are *pale and contracted;* the tongue is clean, moist, and pale; the appetite good; the bowels regular; the urine rather scanty, opaque, and feebly acid; the pulse small, soft, and not quicker than is natural.

In the second stage, the general feeling of debility is more confirmed; the nervousness is of a subdued character, and partakes of despondency; the respiration is slightly accelerated, heaving and somewhat oppressed, and attacks of faintness occasionally supervene; the countenance becomes opaque and dusky, with a dejected expression; the general pains of the body are increased and deeper seated, and the pains of the loins are particularly dwelled upon; there is now the livid, swollen, spongy-looking, but really hard gum, having a tendency to bleed; the breath has a peculiar fœtid smell, not altogether unlike the fœtor of a mercurial taint; petechial spots appear on the legs and arms, and the surface generally is easily bruised; the pulse is small, feeble, and slightly accelerated; occasionally a disposition to feverish attacks is evinced, but these, if judiciously attended to, are easily controlled; in some cases the joints feel stiff, and are really enlarged and painful; nodes form rapidly on the clavicle, sternum, and tibia.

In the third and last stage, (of which I have only seen one case,) the breathing was slow, sighing, and very oppressed; a sanious discharge (very different from the sputum of a pneumonia,) was coughed from the lungs; the gums were swollen and painful, the breath very fœtid, and there was general evidence of the fluids of the body being disorganized, in the

appearance of petechiæ and tendency to bleeding from the gums and mucous surfaces of the vagina and rectum. Some hours previously to the close of life, an inability to articulate the desired words, followed by an overwhelming stupor, induced the conclusion that serous effusion on the membranes of the brain had taken place.

Such have been the general and more striking symptoms which the cases of this disease have presented to my notice, occasionally modified, however, by complications with other and pre-existing disorders. A few cases illustrative of the above shall now be shortly enumerated:—

SCURVY IN THE ADVANCED STAGE; MUCOUS SURFACES EXUDING BLOOD; COMA; DEATH.

CASE I.

A. B———, aged 45, wife of a respectable farmer, naturally of a strong and healthy constitution, cheerful, and of active habits, had for the past six weeks been ailing, but not sufficiently so to induce her to seek for medical aid until about a week previously to my seeing her. The disease had then fully developed itself. There were petechiæ; the gums were spongy, swollen, and exuding blood; the mucous discharges from the vagina and bowels partook of the same character; the pulse was slow, small, and weak; she was desponding and shrinking within herself, and when roused uncertain in her speech; the pains of the surface were general, and somewhat severe, and she was indisposed from this cause, as well as from excessive prostration of strength, to be moved in her bed; in fact everything indicated that the powers of life were subsiding. She died three days afterwards. The diet of this female presented no other alteration from usual custom than the absence of potatoes and other vegetables, having with this exception chiefly consisted of the fare enjoyed by persons in her station of life.

SCURVY WITH PETECHIÆ, AND THE SPONGY GUM.

CASE II.

M. S——, female, aged 36, stout, countenance naturally florid, but now a look of sallowness, has been ailing upwards of a month; feels generally weak; is listless and indisposed to exertion; complains much of pains across the loins; breath fœtid, short; feels faint occasionally; pulse small; petechiæ on both legs; appetite good; tongue clean; bowels regular; gums red and spongy. Has lived chiefly on bread, but of this has had sufficient.

CASE III.

E. R——, female, aged 18, very much out of health; countenance sallow and opaque, with tendency to a yellowish jaundiced tint; general pains of limbs; severe pain across the loins; swelling of the mammary glands, which are very painful; breath short; very much disposed to faintness; pulse small and quick; petechiæ; gums swollen, red, and spongy. Diet chiefly bread.

CASE IV.

T. P——, male, aged 28, plumber, stout, active, and in full work; has been ailing for upwards of two months; countenance pale; complains of general pains, more especially across the loins; general stiffness of the lower limbs, and swelling of the knee; pulse small and quick; left leg much covered with petechiæ; appetite good; tongue clean; bowels regular; gums very much swollen, irregular and spongy, generally red, but along the edges a line of the well-marked lead-tinge. Diet has been ample, consisting of bread, meat, beer, &c., but no potatoes.

SCURVY WITH SPONGY GUMS, BUT UNACCOMPANIED WITH PETECHIÆ.

CASE V.

A. C——, aged 50, nurse; feels weak; complains much of general pains, especially in the knee-joints, one of which is stiff and swollen; breath short; pulse small and quick; gums swollen, red, and encroaching much between the teeth. Diet bread and tea.

CASE VI.

J. M——, female, aged 36; countenance opaque; feels very weak; complains of general pains of the limbs; breath very short; throbbings at the heart; gums spongy, red, and painful. Diet chiefly bread.

CASE VII.

J. B——, female, aged 43; pains of right arm; breathing much oppressed; has fainted three and four times a day lately; gums red, swollen, spongy, and slightly exuding blood. Diet bread and tea.

CASE VIII.

A. M——, female, aged 38, looks ill; countenance opaque; complains of general want of strength; is listless, and incapable of exertion; general swellings and pains of the limbs; breath short; feels very faint on the slightest exertion; pulse weak and small; gums spongy, and exuding blood. Diet has been ample, but devoid of potatoes and vegetables.

CASE IX.

S. B——, female, aged 33; countenance very sallow; complains much of weakness and stiffness of legs; indisposed to exertion; pains in the loins very severe; breath very short, and has fainted away occasionally; pulse quick, and generally disposed to be feverish; gums white at the lower part, at the edges swollen and red. Diet chiefly bread.

CASE X.

S. L., male, aged 32, naturally robust; countenance expressive of debility; complains of his joints being stiff, and there is a swelling of the elbow; the gums are white and contracted below, but red and spongy at their edges. Diet has been ample, of bread, meat, and beer.

CASE XI.

L. C., female, aged 36, generally weak; pain of loins; breath short; has fainted; gnawing pain of stomach; mouth stiff and swollen; gums swollen, red, and tendency to bleed at their edges. Diet chiefly bread.

SCURVY, WITH PALE CONTRACTED GUM, PASSING INTO THE SPONGY SWOLLEN RED GUM.

CASE XII.

E. C., male, aged 17, tailor, countenance pallid and opaque; complains of want of strength and inability to exertion; limbs feel stiff and fail him; has pain of

stomach, and across the loins; breathing difficult; tendency to faint; pulse soft, slow, and weak; has been feverish; gums generally white and contracted, but swollen, spongy, and red at the edges. Diet ample, but deficient in potatoes and vegetables.

CASE XIII.

M. H., female, aged 45, looks ill and weak; countenance opaque; excessive pain across the loins; limbs weak; gums white and contracted, but spongy at the edges. Diet chiefly bread, and deficient in quantity.

CASE XIV.

E. H., female, aged 44, weak; pains in loins; gums white and swollen, subsequently became red and spongy. Diet chiefly bread.

CASE XV.

A. B., female, aged 28, general pains, especially across the loins; jaundiced skin; gums for the most part white and contracted, but red and spongy at the edges. Diet ample, but devoid of vegetables.

Many similar cases might be added to the above, which have been selected as illustrating the general character of the disease in its several stages as now occurring. I shall merely, in continuation, refer to some cases which fell beneath my observation in the Crediton Union Workhouse. In March last, and for some short time previously, much debility and sickness had prevailed amongst the inmates. The sallow countenance and pale anæmic gum could be discovered, both amongst the males and females, while in many of the latter, the gum assumed the decided spongy, swollen, red character. In some this was combined with the pale contracted gum, and in others with the swollen white gum. The worst cases occurred chiefly amongst those of naturally weak constitutions; and as a fact worthy of note it may be mentioned, that the most severely afflicted were children born with a venereal taint. These cases need not be particularly dwelled upon, as they merely presented symptoms similar to those already enumerated; but some brief enquiry into the attendant circumstances may be useful, as from their position these are more certain and defined than in the other cases.

The general construction of the house, size of the rooms, the temperature and ventilation therein maintained seemed to me to be in all respects most unexceptionable. The clothing was warm and sufficient. The printed dietary, which is as follows, is the same as that of every union workhouse in the kingdom.

The weekly amount of food allowed according to the dietary to each—

	Man.	Woman.
Bread	102 oz.	85 oz.
Cooked meat	12 oz.	12 oz.
Soup	3 pints	3 pints.
Broth	4½ pints	4¼ pints.
Cheese	8 oz.	8 oz.
Potatoes, &c.	4½ lbs.	4½ lbs.
Suet or rice pudding	14 oz.	14 oz.

From the failure of the potato crops there has been substituted for this vegetable, during the past year, with the exception of July and August last, when potatoes were used, the same weight of boiled rice, with the occasional use in the soup of fresh vegetables, as cabbage, carrots, parsnips, &c. From this it will be seen that the general diet of the Union has been most ample and excellent, and I can myself testify to the good quality of the several materials used.

We may now proceed to discuss the nature of the disorder affecting these people, and the causes which have tended to produce it. In the first place it may be observed there is every fair ground for concluding, that the cases enumerated in which the gum was pale and contracted, are essentially instances of this disease, but in its earlier and slighter form; they offer the same evidence of general debility, tendency to faintness, oppresson of breathing, pains across the loins,—in fact the same general indications of departure from the normal and healthy state of the blood, differing only in degree from that more-marked deterioration in this fluid, characteristic of the confirmed disease.

We may also conclude that the blanched contracted gum is the forerunner of the swollen, spongy-looking, and eventually bleeding gum; for we have seen in the above cases that the former occurs, on the one hand, in conjunction with the other and more recognized symptoms of scurvy, including petechiæ; while in others it occurs, combined with or passing into the latter. Thus we see the gum pale and contracted, pale and swollen, pale and contracted at the lower part, with a spongy, swollen, red edge; the upper gum pale and swollen, while the lower has been swollen, red, and spongy, the pale gum passing in the course of a few days into the swollen, and then into the red and spongy gum. In fact, the cases offer every variety of example in which the pale contracted gum is combined with the swollen, red, spongy gum; and as the former invariably precedes the latter, and for the most part accompanies the slighter forms of the disease, we are justified in stating that the anæmic gum is one of the symptoms indicative of scurvy, but of the earlier stage of the disease, and which immediately precedes that in which there are morbid deposits taking place, whether these be in the gums, in the joints, in the muscular system, or elsewhere.

There is one other symptom to which attention may be directed,—the pain across the loins. This has been invariably experienced, and has proved most painful and persisting in its nature; it has remained unrelieved, though the gums may have recovered their healthy character, the countenance its wonted appearance and expression, and the constitution its general tone and strength. I am disposed to think this pain is not due to disorder in the urine or kidneys, but to a neuralgia of the lumbar nerves. The frequent occurrence of fixed neuralgic pains in other parts conduces very much to this opinion.

It is unnecessary in the present day to go into any very minute investigations of the remote cause of scurvy; at the same time it may not be altogether useless briefly to review the external relations of the persons who have been submitted to its influence. The more obvious and interesting agents generally to be regarded in an enquiry of this kind, are the conditions of the atmosphere, the occupation of the individual, the nature and amount of his food, &c. &c.

The winter has been unusually severe, and protracted. During the last six months,* the temperature has been lower, with a lower range of atmospheric pressure, and a less amount of rain, than is the usual average of these months, while the winds have blown chiefly from the eastward instead of from the westward.

That cold has some influence in the production of scurvy may be assumed, from its being a disease for the most part of late winter or early spring, and from its frequent occurrence in the colder latitudes of the north of Europe; but that cold is not the cause of the disease may also be inferred, from its not occurring at these periods or in these situations, excepting under certain conditions, and that under these conditions it occurs in warm weather, and more southern latitudes. We therefore conclude that cold is not the cause of scurvy, but that when such cause may be in force, it greatly predisposes to it.

That impure air was not the cause of the disease in these cases is evident, from many of those affected having been persons occupied much in the open air, or living in well ventilated rooms, as in the Union Workhouse, where the usual regard had been had to this particular. Doubtless the living in an impure air would tend to depreciate the general health, and thus render the system more susceptible of the influences of this disorder, but it cannot be esteemed as a cause.

That scurvy is not produced by any peculiar occupation is evident, from its occurrence amongst persons engaged in various trades, as likewise in those following no particular calling. In fact it has been rather shown, more especially in the Crediton Union, by the extreme state of disease in the women and children there, that the want of occupation, and the absence of exercise thereby engendered, much predisposes to its attacks.

We now come to the important question of food:—First as regards amount, there has been, in the course of the above cases, the most satisfactory evidence offered that the cause of this disease can not be referred to a deficiency in this respect, as very many of those affected by it have been well off in means, and certainly those in the Crediton Union Workhouse enjoyed a diet which has been shown to be most ample; we must, therefore, look to kind and quality.

It cannot fail to have been observed that the greater proportion of those afflicted have lived chiefly on fermented bread;* that such bread is not the cause of scurvy, its long and universal use is sufficient evidence, at the same time the occurrence of the disease in those using it so freely, shows it is not, as has been supposed, prophylactic against it. The same may be said of rice, the poor generally not having eaten it, while its use in the union workouse has shown it incapable of preventing its occurrence. That salted provisions are not its cause is also certain, as by far the larger proportion of those affected have not eaten of them. It now remains to speak of the absence from the diet of the usual esculent, the potato. In this respect only has the food of all these people differed from that of other seasons, and it is here worthy of remark, that in the Crediton Union, there intervened between the last use of potatoes and the prevalence of the disorder referred to, a period of about six months, and experience has shown this to be the usual time, a diet devoid of fresh acescent principles takes to produce scurvy.

* The mean height of the thermometer and barometer, the prevailing winds, and amount of rain, from October, 1846, to March, 1847, compared with the averages of these months during ten years.

	Mean Temperature.		*Mean Atmospheric Pressure.*		*Prevailing winds.*		*Amount of Rain in inches.*	
	1846 & 1847.	For ten years.	1846 & 1847	For ten years.	1846 & 1847	For ten years.	1846 & 1847	For ten years.
October . .	51.0	53.2	29.47	29.94	N.&N.W.	W.	4.54	3.1
November . .	46.9	45.6	29.67	29.86	E.	W.	3.24	3.1
December . .	36.3	43.3	29.67	29.79	N.&N.E.	W.	0.84	3.6
January . .	40.5	38.6	29.47	29.85	E. & S.E.	N.E.	2.52	2.9
February . .	39.9	41.6	29.74	29.91	E.& N.E.	W.	1.50	2.6
March . . .	42.9	44.4	29.61	29.98	S. & S.E.	W.	3.28	2.1
Means and Totals	42.9	44.4	29.60	29.88	E.	W.	15.92	17.4

* It is a remarkable fact that the cases of scurvy which came under Dr. Heberden's observation, at St. George's Hospital, in 1795, had lived chiefly on bread and butter.—"Med. Trans." Vol. IV.

As the recent failures in the potato crops have excited the enunciation of certain political opinions condemnatory of the employment of this esculent, it may not be useless briefly to refer to the conclusions which have been arrived at by able and competent authorities in reference to its anti-scorbutic properties.

Sir Gilbert Blane, in his account of the diseases of the Fleet, in 1781, mentions that the potato, sliced up with vinegar, proved useful in preventing and curing scurvy; similar testimony is subsequently offered by Mr. Dalton. (*Lancet*, Sept. 22, 1842.) Mr. Berncastle, and M. Fontenelle have, however, shown that its usefulness in this respect is not destroyed by cookery as was supposed, the one having employed it boiled in the usual way, the other slightly baked. Dr. Baly, who has given a digest of these and other opinions, (*Med. Gaz.*, Feb. 16, 1842,) adds his own valuable testimony to its being, as ordinarily cooked, "an admirable preservative against scurvy." The facts from which Dr. Baly deduced this conclusion are most striking. As physician to the Milbank Penitentiary, he observed, that scurvy was unknown amongst the convicts whose diet contained a fair allowance of potatoes, (5lbs., together with an onion weekly,) while it was of very frequent occurrence amongst the military offenders, whose diet was almost wanting in this respect, (only ½lb in the week,) and that since these latter have been allowed the larger amount of potatoes the disease has not recurred amongst them. Similar and equally conclusive evidence is deduced by Dr. Baly, from the occurrence of scurvy in other prisons of the kingdom.

We may still proceed one step farther, and show to what peculiar principles the antiscorbutic qualities of the potato are due, and in doing so I shall quote the summary given by Dr. Baly. "A glance at the chemical analysis of the potato, at once explains its antiscorbutic virtue. The various fruits, succulent roots and herbs, which have the property of preventing and curing scurvy, all contain, dissolved in their juices, one or more organic acids,—such as the citric, tartaric, and malic acids. Sometimes these acids exist in the free state, but more generally they are combined with potash and lime, or with both these bases. Now, potatoes have been submitted to most elaborate chemical examination by Einhoff and Vauquelin; and by both these chemists they have been found to contain a vegetable acid in considerable quantity. According to Einhoff this acid is the tartaric, combined with potash and lime. According to Vauquelin it is the citric, partly in combination with those bases and partly in the free state. The farinaceous seeds, as wheat, barley, oats, and rye, which are destitute of antiscorbutic property, contain no organic or vegetable acids."

From all that has been now stated we must come to the conclusion, that the recent occurrence of scurvy in Exeter is due to this one cause—a deficiency of food containing acid principles;* and that the potato has hitherto been the means whereby these acid principles have been supplied. We may farther conclude, that the peculiar symptoms of this disease are not developed until after the system has been deprived of food of this nature for some months; that the persons most liable to be affected by it are those naturally of weak constitutions, or who are submitted to inactive and depressing circumstances; and that protracted cold weather greatly predisposes, on the one hand, by depreciating the powers of the system; and on the other, by checking the growth of fresh vegetables, and rendering such as are raised deficient in proper juices.

From all that has now been stated of this disease,—from its symptoms, its predisposing and remote causes, has any light been thrown on its nature or proximate cause? We see evidently that it primarily consists in a peculiar state of anæmia, and that this anæmic state, unattended by loss of appetite or irregularity in the alvine secretions, is accompanied by a general dusky pallor, weak pulse, breathlessness, and a disposition to syncope—a condition of the system early followed by, and complicated with, low feverishness and tendency to local deposits, causing swollen red gums, stiffness and swelling of the joints, together with petechiæ, hæmorrhage, and nodes, a series of phenomena distinctly indicating the proximate cause of this disease to be a disordered state of the blood, and which disordered state it would appear, from the investigations of Mr. Busk,* mainly consists in the amount of fibrin, albumen, and salts and water, exceeding the proportion of health, while that of the hæmatosine falls below it.

In accordance with the above indications of the nature and origin of this disease, the mode of treatment pursued has mainly been the use of acids, and much benefit has resulted therefrom; otherwise the use of potatoes, if they could be procured good, and other vegetables, has been enjoined, together with oranges, cider, vinegar, pickles, &c., in fact, such treatment as is usually recognized amongst us as adapted for the cure and counteraction of scurvy.

* It must not be understood from this that scurvy is stated to be solely caused by a deficiency of vegetable food. Scurvy is essentially a disease of depraved nutrition, and may be produced by a too restricted and exclusive use of any kind of food. In this paper I am strictly confining myself to the nature and origin of the disease now prevailing.

* Art. "Scurvy," by Dr. George Budd—"Cyclopædia of Practical Medicine."

ON A FEW POINTS CONNECTED WITH THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF PERICARDITIS.

By E. J. Shearman, M.D., Rotherham.

Pericarditis is a very frequent and a very dangerous disease: it attacks those persons most exposed to changes in temperature and climate, and least likely, from position in life, to be able to take precautions to prevent, or use remedies to cure such a disease. It is consequently of the utmost importance to society that such an affection should, if possible, *admit of easy detection*; and that its *nature* and *treatment* be plain and straightforward to medical practitioners in general.

In Dr. Bartolomé's Essay on this subject, published in this Journal of the 5th of May, he remarks, "The *diagnosis* of pericarditis is not always easy;" it has been mistaken by Corvisart, Andral, and Laennec, for other diseases;—that the "fibrous portion of the pericardium is that first affected;" and he advances a mode of treatment so contrary to that which I have been in the habit of considering as the one most approved of by all the late pathological writers on this disease, that I trust he will allow me to notice his statement, with the laudable motive of searching for truth.

I shall confine my remarks to pericarditis only, although I am perfectly aware that endocarditis, with all the resulting effects of valvular disease, atrophy, dilatation, and hypertrophy, are generally its consequences; but space will not allow these to be named.

The following order may be as well observed:—

1st. The pathological condition of the membrane involved, and its terminations.

2nd. The best mode of determining, by examination during life, the actual condition of the part.

3rd. The most approved method of treatment as described by the best authors of the present day.

I.—The Pathological Condition of the Part.

Although the pericardium is composed of both fibrous and serous textures, yet the same arteries supply both, and it will depend upon the condition of the blood supplying the inflamed capillaries what the exudation corpuscles produce.

Dr. Bartolomé says, "very probably pericarditis generally, if not always, first attacks the fibrous pericardium," then, afterwards, "the most common causes besides rheumatism, are blows, pressure, inflammation propagated along the lungs or pleura, &c." He gives no proof of the fibrous being the membrane first affected, and is "at a loss how to describe the first stage of the disease." But, if pericarditis arises from inflammation propagated along the serous membrane of the pleura and lungs, it is not very likely to affect the fibrous membrane first.

I am not aware of any other author having laid any stress upon the fibrous membrane being immediately implicated. I have had a great many opportunities of examining the parts after death, having during the disease anxiously and narrowly watched its progress; and until I see by dissection that I am wrong, I shall feel inclined to agree in the opinions which I quote below.

The same degrees of congestion, nervous and vascular irritation, determination of blood, obstruction of capillaries from *atonic* enlargement, and adhesion of white corpuscles in the vessels; distension of blood in the arteries *before*, and emptyness of the veins *beyond*, impeded or arrested circulation *at*, and increased circulation *around*, the obstruction; with change in the whole quantity of blood by increase of fibrin and diminution of the secretions, exhaustion and depression either from excessive excitement or the presence of pus or other foreign matters in the blood, must attend this as well as all other inflammations.

If the blood be excessive in red particles, as in very robust and healthy persons, there will be coagulating lymph, serum, and blood exuded; if deficient in red particles, as in anæmic, lymphatic and leucophlegmatic subjects, tubercular deposits will be formed; if fibrin predominate, the serous membrane will be covered with a thicker and more adhesive layer of lymph, and of the most plastic character. But the blood may be so altered in quality, and the quantity of its salts and red particles so much increased, as may produce even osseous deposits. The fibrin may be so low in character as to allow only *aplastic* lymph to be secreted, in which case very slight, if any adhesion, would take place; and pus, curdy matter, yellow tubercle, &c., would be deposited. It might be *euplastic* and become highly organized; or *cacoplastic*, and susceptible of only a very low degree of organization, particularly in the chronic stage, thus giving origin to fibro-cartilage, grey tubercle, &c. It therefore depends on the character of the blood as well as upon the character of the membrane inflamed, what the product of inflammation will be; and this easily accounts for the various statements of many of the old authors,—of bony, bloody, purulent, curdy, fibrinous, and various other effusions having been found in cases of pericarditis.

It is very evident that some of these products of inflammation are much more adhesive in their nature than others, and I have taken the opportunity of naming all, for the purpose of giving the greatest latitude possible to the difficulty this will give us in diagnosis. But it is well known that pericarditis, like rheumatism, is a disease of a highly inflammatory nature, and oftener attacks those whose blood is loaded with red particles and fibrin, than the weak and anæmic; and those who have had the most extensive experience in examining such cases after death, agree in saying that *adhesion of the pericardium* is by far the most frequent result.

The first and immediate effect of pericarditis is

effusion of a small quantity of congulating lymph and serum on both sides of the pericardium; this increases according to the activity of the attack, or the success of remedies. It may go on to such an extent as to bulge out the bag of the pericardium enormously, or it may stop short, and only produce so much mischief, as to impede the smooth motion of the heart in its natural capsule. There may be the other deposits mentioned before, but there *must* be both effusion of lymph and serum.

The general opinion amongst authors, without one exception, I believe, is, that after every case of pericarditis, the lymph unites the pericardium to the substance of the heart, and the cavity is thus either partially or wholly obliterated; and this is considered the most efficient cure which the parts are capable of admitting. For some years I have had the opportunity of watching numerous cases of this disease, in the practice of our late lamented and talented associate, Dr. Favell, as well as in my own; and there are at least two specimens of his in existence, and one of my own, which he added to his collection, where, after the most positive proofs of pericarditis having existed from acute rheumatism, verified by several medical gentlemen and students, the patients quite recovered under the specific influence of mercury, and died afterwards of some other disease. On dissection, the pericardium in each case was found *unadherent throughout*, and the parts which had been inflamed are quite distinct and easily discerned from the rest, being of a much lighter colour, thicker, and raised from the surface of the uninflamed part of the membrane. This is a circumstance deserving notice, for it gives great encouragement to the practitioner to treat the disease very actively, with so good a prospect of perfect success.

II. The best Mode of detecting Pericarditis during Life.

Dr. Bartolomé remarks, "All authors seem to agree, that the most unequivocal sign is the presence of pain over the region of the heart, particularly if aggravated by pressure." He lays great stress upon the quality of the pulse, as a diagnostic symptom, stating in one place that it is "the loose throbbing pulse of acute rheumatism, when the fibrous membrane alone is inflamed, but will vary in proportion as the serous membrane becomes affected;" and in another, that "it is the jerking immediately felt along the arteries, that distinguishes the pericarditic pulse from that produced by merely accelerated circulation." But he afterwards says, "we cannot form our diagnosis from the pulse alone." He mentions the "*bruit de soufflet*," which is *pathognomonic* of inflammation of the *endocardium*, but passes over very slightly the "*craquement de cuir*," and "*bruit de cuir*," and does not notice the "*bruit de frottement*."

The symptoms, as described by Dr. Watson, to whom, simultaneously with Dr. Stokes, we are indebted for the first information of the diagnostic physical signs, are,—a singularity of manner and peculiar expression of countenance, strange aspect of distress in the deportment, palpitation, oppression at the epigastrium, catch in the breathing, dry cough, inability of lying on the left side; pain in the region of the heart, increased by inspiration, pressure between the ribs, or upwards under the diaphragm; stiffness, and pain in the left shoulder, extending into the arm, elbow or wrist; and *delirium*, often *wild* and *furious*, not dependant upon any disease of the encephalon.

All these symptoms put together would not be enough to make us sure that this was pericarditis; for truth, in all its kinds, is most difficult to win, and truth in medicine the most difficult of all. Clinical observation, though never blind, was, until lately, always deaf; but now, with the aid of the ear, when, with even *some* of these symptoms, we find the *attrition murmur*, Dr. Latham says the disease cannot be mistaken for anything but pericarditis.

Before the true *attrition* or *friction-sound* is heard, there is almost always, and generally for some days, a kind of *clanging, harsh, churning, creaking*, or *crumpling* sound heard over some part of the præcordial region, *not* conveyed to the aorta, pulmonary artery, or carotids. This is not constantly present.

In pericarditis there are the fluid products of inflammation as well as the solid: there is serum as well as lymph; and the signs of fluid effused within the pleura and pericardium are the same. The fact of its existence, and the measure of its accumulation within the pericardium, can only be known by the degree and extent to which the præcordial region, and perhaps, some space beyond it, may be *dull to percussion*. Thus, *dulness* sometimes occupies a part, sometimes the whole, of that region; sometimes it reaches beyond, as high as the *second*, and even the *first left rib*; sometimes it extends *beneath the whole length of the sternum*, except about an inch at the top, and even *beneath the cartilage of the ribs on the right side*.

This *dulness to percussion* is a most important sign, and hardly inferior to, or less diagnostic of, the pathological condition to which it points, than the *attrition, friction, or to-and-fro murmur* itself, which is caused by the rubbing of the two layers of membrane on each other, after they are covered with lymph.

But there are two other physical signs of this disease which often but not always attend,—1st, an *undulatory motion*, visible to the eye, *between the cartilages of the second and third, or the third and fourth ribs*, on the *left side*, or in both situations at the same time; 2nd, a vibratory motion, like the purring of a cat, *felt* just over the same places as the undulatory motion is seen. These two last signs sometimes attend disease of the semilunar valves of the aorta and pulmonary artery, and are therefore *not* pathognomonic.

During the life-time of Corvisart and Laennec the physical signs of pericarditis were not discovered, and it is no wonder they speak with so much doubt about it. But since Dr. Watson, of London, and Dr. Stokes, of Dublin, distinctly ascertained that *increased dulness on percussion*, and the peculiar *friction to-and-fro sound*, were pathognomonic of this lesion, no one who has once listened attentively to this sound can ever again mistake it, or misinterpret its meaning.

In all acute cases of pericarditis I believe this *friction-sound* can be heard distinctly if listened for. The harsh churning sounds spoken of before are generally the precursors of this more distinct sign, but they are not always to be heard. The *to-and-fro friction-sound* is always evident, and if watched quite distinct.

In cases where a very large quantity of serum is exuded, the *friction-sound* may only be heard during the first few hours or days of the disease, the fluid having so far separated the pericardium from the heart as to prevent its touching, *at which time the dulness of percussion would be more marked.* But under the influence of proper remedies, this fluid becomes absorbed in a few more days to such a degree, as again to allow the membranes to rub against each other, *and then the friction-sound re-appears.* I believe this very rarely happens, but I have certainly noticed it myself in cases which I have narrowly watched.

The difference of density in the fluid in the pericardium does not alter the *nature* of this *friction-sound*, for it is *conveyed immediately from the outer layer of the pericardium*, and appears to proceed from a surface immediately under the ear. This sound is perfectly distinct from the *systolic bellows-murmur of endocarditis*; but when endocarditis exists at the same time, as is often the case, this bellows-murmur is heard as well, and frequently confuses, for a time, the friction-sound.

I would recommend any one who is sceptical on this point to read Dr. Latham's late work on "Diseases of the Heart," in two volumes, 1846-47. I name this work above all others because Dr. Latham has taken his data from ninety cases of pericarditis, attended by himself in St. Bartholomew's Hospital, all of which were open to the observation of the medical staff of the hospital and students; and he is a physician of such decided talent and probity as to carry conviction to every unprejudiced reader.

But there still may come a difficulty, which I will briefly allude to. In a case of pericarditis which has been apparently cured by treatment, and where most of the pericardium has become adherent; what will be the pathognomonic physical sign, should another attack of inflammation make its appearance? Here auscultation is not to be entirely depended upon. The *impulse* will be *great, tumultuous.* There *may* be some slight friction-sound if a very large part of the pericardium still remain *un-adherent*, but generally there is little or none. If the former attack was cured *without adhesion*, (a circumstance by no means impossible,) then I presume the very same physical signs which have been already described will become again pathognomonic. In most second attacks the endocardium, valves, and cavities become diseased, and during acute inflammation these sounds are often difficult to diagnose, unless the ear be well accustomed to such abnormal sounds.

It may be well to mention a combination of sounds originating in disease of the *semilunar valves* from *endocarditis*, which sometimes simulates this friction-sound of pericarditis, and might mislead an ear unpractised in auscultation. I allude to a *direct* as well as a *regurgitant* murmur existing in the *semilunar valves* of the *aorta* or *pulmonary artery*, and not unfrequently met with in the aorta. The character of this sound is different to the friction-sound, although the peculiarity is difficult to describe. The *length* of *both sounds* in the *pericarditic friction* sound is the *same*, but the *systolic* is *longer* than the *diastolic* sound in that originating in the semilunar valves. A very little education of the ear will be found sufficient to distinguish the difference. The *valvular sound* is also heard *louder* at the *top of the sternum* than at the *apex* of the heart, and is conveyed by the vessels, whereas the *intensity of the friction*-sound is generally in the *opposite direction*, and is *not conveyed* by the vessels. We now come to—

III.—"*The most approved Method of Treatment.*"

Dr. Latham, in 1847, says, "*In foreign practice no mercury is used* from first to last, but all the power of common antiphlogistic remedies is brought to bear upon the disease, and thus its symptoms are mitigated or subdued, yet they return again and again, and are again and again mitigated or subdued, and so the patients are kept alive for a week or ten days, and *then they die*, in the great majority of cases."

M. Bouillaud's treatment of pericarditis is of this antiphlogistic description; he never uses mercury; and in his treatise on it, he says almost every case is found on dissection to have the pericardium adherent. In inflammation of the pericardium the products or exudation of the inflammatory action are deposited in a shut sac. There is not only congestion, great nervous and vascular irritation, and determination of blood, with their usual consequences, but a large quantity of lymph and fibrin are exuded, which, so far as I know of the remedies for inflammation, can only be checked, stopped, or absorbed, *during the time the system is under the specific influence of mercury.*

Bleeding, both general and local, is undoubtedly invaluable, and ought to be carried to such an extent as to cut off the supply of a certain quantity of blood to the part, and decrease the quantity of fibrin in the blood. Purging to a certain extent is necessary, but that will not absorb either the serum or lymph. *Opium is of the greatest benefit*, by soothing the excessive irritability

of the nervous and vascular excitement, and relieving pain; and counter-irritation, particularly blistering, is invaluable, by exciting the action of the absorbents near the seat of the lesion, and in that way relieving the distension of the vessels. But all these remedies combined will not prevent a case of pericarditis making progress to that stage which ends in adhesion and premature death.

I have carefully examined the works of Stokes, C. J. B. Williams, Watson, Elliotson, Hope, Copland, Joy, and Latham, and I find my opinions borne out by all of them. I am convinced that *mercury* has the power of doing *something more* in inflammation of the pericardium than venesection and other antiphlogistic remedies can do; and that, upon this something being done, the life of the patient often depends.

Dr. Taylor, one of the physicians to University College Hospital, who took the highest honors both in the College and University of London, has published in the *Lancet* forty cases of pericarditis, which he has treated in the Hospital under the constant inspection of the pupils. I have read them all, and he has never once omitted to do all in his power to bring the patients under the specific influence of mercury; *where he has failed to do so his patients have died*, but where he has succeeded his patients have generally recovered. These cases are worth reading, being written by one whose knowledge of the disease is more extensive than that of most authors.

In iritis the influence of mercury is quite visible in removing effused lymph, and it thus obviously promotes absorption as well as prevents effusion. In syphilitic ulcers mercury soon removes the callous indolent margin. I have heard an opinion canvassed that mercury destroys the red particles of the blood, and produces a disposition to erythematic inflammation which is incompatible with healthy or plastic. But, if this be true, how can healthy lymph be thrown out, and granulations formed, in such numerous instances under its influence, as we are constantly in the habit of observing? It is more probable that the specific action of mercury *changes the condition of the blood*, and *diminishes the quantity of fibrin and white corpuscles*, as we find mercury most useful when the blood is buffed, and in serous and fibrinous inflammations, where effusions take place to a great extent.

Dr. Latham says, "my experience tells me that whenever the exocardial murmur has ceased early, *salivation* has first taken place." And in the relation of the events of the ninety cases, there were *two* in which he *could not* produce the specific action of mercury. *These two died*, and only one more. In another place, he says, "not in a single instance did the *exocardial murmur cease* to be audible, until *salivation* appeared."

Again he says. "In English practice, mercury is given from first to last, but it is for a time as if it were not given at all, for it produces no sensible effect. Common antiphlogistic remedies, however, are able again and again to mitigate and subdue symptoms; and so, at the end of a week or ten days, the patients are *still alive*, yet they are *ready to die*; but in a great majority of cases they do not die. *Salivation arrives late, and seems to save them.*" !!

Colchicum, tartarized antimony, and aconite, ought to be mentioned as remedies, which occasionally, very much allay the excessive action of the nervous and vascular system. They require caution and judgment in administration, perhaps more so than those before mentioned.

In my own practice I have been in the habit of treating these cases by general bleeding to a certain extent, followed by cupping, leeches, and blisters; but I have placed my chief dependance upon well regulated doses of calomel and opium, and frequent frictions with strong mercurial ointment, until ptyalism is produced.

It would have been easy for me to give numerous other quotations to prove the necessity of putting pericarditic patients under the specific influence of mercury as *quickly as possible*, but space will not allow. I trust, however, that I have not uselessly intruded on this Journal, and refer, in conclusion, to the words of the illustrious Sydenham:—"Ars medendi (si quid ego judico,) in eo potissimum cardine vertitur, ut certa aliqua et consummata undique ac fixa Methodus Medendi in publica commoda tradatur, eam intelligo quae, satis magno experimentorum numero corroborata suffultaque, huic vel illi morbo devincendo suppar invenitur." Sydenhami Opera, Praef. Ed. Tert., 16.

Rotherham, 8th May, 1847.

CASES AND NOTES FROM HOSPITAL AND PRIVATE PRACTICE.

By C. M. Durrant, M.D.,
Physician to the East Suffolk and Ipswich Hospital.

(*Continued from page* 122.)

Case XIX.

HÆMATURIA; ASCITES, AND GENERAL ANASARCA.

An inkeeper, aged 45, of leucophlegmatic habit, requested me to visit him on the 4th of October, 1845. His medical attendant, whom I met in consultation, stated that his habits had been very irregular from excess in drinking; that he had for some years exhibited more or less of the hæmorrhagic diathesis, as evidenced by bleeding from the nose and gums; and that the commencement of his present attack was hæmaturia, followed by general dropsy. He had been out of health for a lengthened period, but the present severe symptoms had existed only for about a week. I found him in bed, his head and shoulders elevated by pillows, and breathing with difficulty; countenance

sallow; conjunctivæ injected and bilious; a scattered eruption of acne rosacea upon the nose, cheeks, and chin; tongue coated with a creamy fur; mouth sore from mercury; no thirst; appetite indifferent; bowels very irregular; evacuations yeasty; complains of a dull aching pain in the lumbar region, not increased by pressure; micturition painful; urine much diminished in quantity, the colour of blood, and containing a large quantity of coagula; abdomen enormously distended, tense, and with very evident fluctuation; its parietes, as also the thighs and legs, anasarcous; scrotum greatly distended, and very painful; pulse nearly natural, and of good strength.

Percussion yielded a tolerably healthy resonance over the entire chest; breath-sound normal, unaccompanied by rhonchus, but of diminished intensity over the lower third of the right lung; no morbid dulness over the præcordial region, and with the exception of a faint blowing murmur accompanying the first sound of the heart, with its maximum over the apex, no abnormal phenomenon was elicited by a stethoscopic examination of this organ.

Ordered—cupping from the loins to twelve ounces; one sixth of a grain of elaterium every three hours, until free purging supervened; saline mixture, with hydrocyanic acid, and spirits of nitrous æther every four hours. To take good mutton-broth or beef-tea, with weak gin and-water as a beverage.

6th. Can now lie horizontally in bed; countenance improved; pulse 72, of tolerable strength; mouth very sore from mercury; has taken half a grain of elaterium in divided doses, from which he has derived great relief, this medicine having procured a discharge of a very large quantity of serum; abdomen less distended, and softer; pain in the back removed by the cupping; scrotum very painful, and not diminished in size; urine still contains coagula.

Repeat the cupping to the loins to twelve ounces; four needles to be inserted into the scrotum; three grains of the iodide of potassium to be added to each dose of the mixture.

8th. Has taken cold, and complains of severe pain in the forehead, which presents an erythematous blush; pulse 80; abdomen diminished in size, and much less tense; scrotum very painful, its integument erythematous; penis greatly distended with serum; urine escaping involuntarily.

Medicine to be continued; to repeat the elaterium; to use a urinal; and to have the scrotum constantly covered with flour.

10th. Erysipelas on the face continues; mouth still very sore; pulse 84; abdomen and legs much diminished; the scrotum still enormously distended, less red, and not painful. One-sixth of a grain of elaterium produced copious watery evacuations; urine still contains much blood, but is free from coagula.

The elaterium to be repeated; face to be covered with flour; to take one grain of gallic acid, with each dose of the mixture; the fluid to be evacuated from the scrotum by means of a small trocar.

13th. Two pints of serum have been drawn off from the scrotum; free purging, with great relief, has again followed the pill; erysipelas greatly disappeared; tongue cleaner; mouth less sore; appetite good; abdomen tympanitic, and now contains but little fluid; scrotum again distended; lower extremities less œdematous; urine still laden with blood; pulse 90, of moderate strength.

Trocar to be re-introduced; repeat the elaterium; to take two grains of gallic acid three times a day. Continue the mixture.

17th. Continues to improve; erysipelas has disappeared from the face; pulse 86; fluctuation in abdomen not perceptible; œdema of scrotum and thighs much diminished; has been freely purged by one-sixth of a grain of elaterium, taken every morning, and by which he expresses himself greatly relieved. Urine contains much blood.

Elaterium to be continued; to take three grains of gallic acid three times a day, with a mixture of sulphate of magnesia and tincture of colchicum.

24th. Marked improvement in every respect; pulse 80, soft and compressible; no œdema of lower extremities; penis and scrotum greatly reduced; integuments of the latter much thickened; appetite good; has continued to derive benefit from the elaterium, taken on alternate mornings; urine increased in quantity, and now contains but little blood; complexion improved; spirits very good.

To take one-sixth of a grain of elaterium every third morning; to continue the gallic acid, with a sixth part of the following mixture three times a day:—R. Liq. Potassæ, dr. j.; Spir. Ammon Arom., dr. iss; Tinct. Colchici, dr. ss.; Decoct. Sarzæ Co., oz. viiss. M. A mutton chop daily, with half a pint of porter.

From this period the recovery of this patient was uninterrupted, and from frequently meeting him, looking in good health, I conclude that he has remained free from a similar attack.

Remarks.—From the unhealthy cachectic condition of the above patient, the general prognosis in the first instance was highly unfavourable, and rendered more so by his intemperate habits of life, his age, and the existence of hæmorrhagic diathesis. The effusion of serum, which obtained to so large an amount, depended upon a highly congested condition of, and consequently obstructed circulation through, the liver and kidneys, and partly perhaps upon a vitiated condition of the circulating fluid itself, as a result of general cachexia.

The effect of the elaterium was most marked; indeed so great was the relief experienced by the full operation of this medicine, that the patient earnestly and repeatedly begged for its repetition. The introduction of a small trocar, for the purpose of relieving the enormously distended scrotum, was also attended with favourable results; indeed, in many instances of serous as well as purulent effusion, it may be questioned whether the relief to the system, and consequently the chance of recovery, would not be materially enhanced by the earlier removal of the fluid by paracentesis. The hæmaturia, (resulting also in part from intense congestion, and in part from cachexia,) although diminished as soon as the balance of the circulation was restored by the mercury, did not subside until a direct

astringent was had recourse to, and for this purpose, as I have almost universally found to be the case, the gallic acid acted most favourably.

Notwithstanding, however, this happy termination, and the immunity from a second attack, hitherto enjoyed by this patient, his life can but be regarded as resting upon a precarious basis. The murmur over the apex of the heart, although but feeble and not constant, was still of a permanent character, and indicated an imperfect condition of the mitral valve. From his addiction to spirit-drinking, unless this habit be relinquished, coupled with the cachectic state of the system, the liver must be regarded as being more or less prone to cirrhosis; or again, the kidneys, from repeated irritation and congestion, to sooner or later assuming the form of granular degeneration.

Case XX.

UTERINE HÆMORRHAGE; DEATH: INSPECTION.

While staying from home, I was summoned in haste to visit Mrs. ———, aged 73. On arriving at the house I was informed that she had been for four years the subject, at intervals, of uterine hæmorrhage, and for which she had been under the care of two or three medical practitioners. On the previous Sunday she had walked to and from church, without increasing the discharge, and her health and strength for some weeks had, it was stated, materially improved.

I found her in bed; face pale; countenance leucophlegmatic; skin cool; in good spirits; pulse 70, of moderate strength; tongue clean; appetite had been tolerably good; bowels regular; hæmorrhage from the uterus copious and clotted, but unattended by pain. Abdominal pressure produces no uneasiness. Has never suffered much pain or sensation of bearing down in the region of the uterus, neither has she been the subject of much vaginal discharge. An examination had once been submitted to, but it was unattended, so far as I could ascertain, by any definite result. The existence of polypus has been suspected. The lady herself attributed her malady, or at all events an aggravation of it, to violent sea sickness, when crossing the Channel. She had used occasionally injection of Matico decoction, and also of the Tinctura Ferri Sesquichloridi.

The most perfect quietude was now enjoyned; the constant application of cold vinegar and water to the pubic region, and the diluted sulphuric acid, with laudanum, every four hours during the night.

On the following morning I met the family medical attendant in consultation. Our patient had passed a good night; the hæmorrhage had diminished, and the same means were directed to be persevered in, with the addition of two grains of gallic acid every four hours.

In the afternoon of the same day, a hurried message was received, stating that "Mrs. ——— was dying." On arriving at the house, we found that profuse hæmorrhage had supervened, the patient was blanched, and pulseless, and breathing with great difficulty; the sounds of the heart very feebly audible, and below sixty in the minute. Brandy and ammonia were immediately administered, which having the effect of producing vomiting, happily restrained the hæmorrhage. Under the liberal exhibition of brandy, the patient gradually rallied; and in the evening of the same day being summoned home, I had not another opportunity of seeing Mrs. ——— again alive.

For the following interesting report, informing me of her death, I am indebted to the kindness of her surgeon, and which, with the account of the *post-mortem* examination, I give nearly in his own words:—

"Our patient, Mrs. ———, sank on Wednesday morning" (a fortnight from the period of my last seeing her) "apparently from exhaustion. She had no return of hæmorrhage after you saw her on the evening of the first, until mid-day on the third, when she had considerable flooding, which did not stop by the usual means. I therefore had recourse to injecting the vagina with the Matico decoction, and plugged it with sponge, retaining it by bandage, and gave a few doses of Secale cornutum. She had no return of hæmorrhage whatever after this.

The treatment now consisted in occasionally giving castor oil as required; quinine, with acid and infusion of roses, and gallic acid in the form of pill with it; the strength supported by animal broth, wine, &c.; the plug changed and lessened in size, using at first astringent injections, and latterly, soothing emollient ones." This somewhat improved condition of the patient continued for about ten days, when (as farther stated in the report of her surgeon) "she suffered from spasmodic pain in the region of the colon and neck of the uterus, attended with spasmodic closing of the lower jaw, but there was no difficulty of swallowing when once the fluids were introduced into the mouth. She occasionally was able to open the jaw sufficiently to allow fluids to pass, but it would quickly become fixed again. This state of things continued for the last thirty-six hours of the poor patient's life. She occasionally slept, but there was not any great mitigation of suffering."

Post-mortem.—"I examined the body about ten hours after death, and found the contents of the chest perfectly healthy; the viscera of the abdomen were also healthy, excepting the colon, which was greatly distended with air, and contained a considerable amount of semi-fluid fæces. Patches of the mucous membrane of this bowel were in a state of congestion; the rectum was quite empty; the uterus externally presented the natural size and appearance; the vaginal surface of the os was congested, and of a violet tint; chronic ulcerations existed within the neck. On cutting through its substance, it presented a softened pale appearance, easily breaking up with the finger, and infiltrated with purulent matter; this condition extended some lines within the neck. The body and fundus of the uterus were quite healthy. The vagina was covered with a muco-purulent secretion."

"I am at a loss" adds this gentleman, "to assign any other cause for death but exhaustion;" and to this condition, engendered by the long continued and profuse hæmorrhages, must the immediate cause of dissolution unquestionably be attributed—"death by anæmia,"—the circumstances attending the latter period of the

patient's existence, the syncope, the cold perspirations, the præcordial anxiety, the slow feeble pulse, and the convulsive closing of the jaw, all indeed indicating an insufficient supply of blood to the heart. While ulcerative induration of the cervix uteri is of very frequent occurrence, ulceration, with ramollissement of its texture, is, as far as I have witnessed, or have been able to ascertain, a rare circumstance, more particularly at the advanced age to which the patient in the present instance had attained. This lesion is slightly alluded to by Drs. Burns and Lever, and more fully described by MM. Duparcque and Columbat de l'Isère, in their respective treatises upon Uterine Disease. The description of the affection given by the latter author, under the designation of "Engorgement congestif avec Hêmorrhagie," is so lucid, that I cannot forbear making a few somewhat lengthy extracts from his work, or rather from the translation by Dr. Meigs.

"This species of engorgement, which may occupy the whole, or only the neck, of the uterus, develops itself in the same manner as the preceding, ('Engorgement sanguin de la Matrice sans Hêmorrhagie;') it is likewise produced by the same causes,—that is to say, by a fluxionary movement, which, in this case, is excessive, and in particular, more prolonged; and which, however, is always accompanied by an abundant and continued hæmorrhage. This sanguine discharge from the vulva, the colour, quantity, and consistence of which are variable, is the most constant symptom of the engorgement which occupies our attention. If we explore the parts by means both of the touch and speculum, we find the neck tumefied, softened, and of a more or less deep red colour. The mouth of the uterus, which is enlarged in proportion to the engorgement, as well as the whole surface of the tumour, is the seat of a sanguine exudation, which, though often considerable and permanent, does not at all diminish the congestion. The os tincæ, covered with clotted blood, appears smooth to view, but somewhat uneven to the touch; by gentle pressure, we perceive a slight sensation of crepitation, and cause an oozing of black blood, which escapes as from a sponge. When the disease has reached its last stage, the skin assumes a yellowish straw tint, as in ordinary cancerous affections; the eyes seem dull; and if some women are observed to retain a certain degree of *embonpoint*, it is because the surface of their bodies has become the seat of a general bloating, which conceals the wasting of their muscles. On examination per vaginam, the neck of the uterus is found to be macerated, and transformed into a sort of ulcer, presenting a layer, which is softened and putrid, surrounded by a hard and, as it were, scirrhous tissue. Hæmorrhagic engorgement which has reached this stage is extremely serious, and there is no hope of seeing tissues, so profoundly changed, return to their normal condition. In general, the danger of the disease is in proportion to the violence and duration of the uterine hæmorrhages."

At the commencement of the above case, when hæmorrhage first occurred, or perhaps before this symptom obtained, the os and cervix uteri were probably simply congested, and this condition becoming aggravated by the violent efforts of retching caused by sea-sickness, merged into a state of intense engorgement or subacute inflammation, which in its turn, having continued for a lengthened period unsubdued, gradually advanced to that of ulceration, and finally softening of the surrounding tissue.

The measures adopted were successful in suspending the hæmorrhage, but from the nature of the lesion this result could only be regarded as a temporary alleviation. As in very many instances in which the os and cervix uteri are irreparably diseased, we found upon inquiry that the general symptoms had at no period become prominent by their severity; indeed the only direct symptom indicating the existence of uterine lesion, had been and was the repeatedly recurring hæmorrhage; but this, although contingent only, nevertheless became at once a dangerous and alarming circumstance, and called for immediate attention.

The consideration of cases like the present is highly instructive, inasmuch as they demonstrate the great importance of early examination and early treatment. Tactile exploration and the speculum became absolutely necessary to the satisfactory elucidation of this class of cases, since early treatment can alone avail and prevent those distressing sequelæ, which, if neglected, sooner or later so inevitably follow.

(To be continued.)

REPORT OF CASES OF STRANGULATED HERNIA, WITH OBSERVATIONS.

By Clement Hawkins, Esq.,

Surgeon to the Cheltenham Dispensary, and Female Orphan Asylum, Cheltenham.

(Continued from page 259.)

REMARKS.

In performing the operation in the cases which form the subject of this communication, the old practice of opening the sac was adopted. I have never witnessed an operation for strangulated hernia in which the stricture was divided and the contents of the sac reduced, without exposing its contents. I have repeatedly seen the attempt made by the most skilful anatomists and dexterous surgeons, but it has always failed, and in many instances the patient has been subjected to the inconvenience of a larger hernia than existed before the performance of the operation, by the division of the external abdominal ring.

About twelve years ago I heard one of the most able and accomplished surgeons in England say, that, however desirable it may be to divide the stricture, without opening the sac, it was a proceeding involved in difficulty, and generally inapplicable in practice. This opinion is opposed to the experience of that excellent surgeon, Mr. Aston Key, to whom is due the merit of reviving the operation of Petit. This gentleman attributes much of the success he has met

with in practice to the adoption of this method. In a recent work on abdominal hernia, by Mr. Teale, of Leeds, there is a table of thirty-two cases of strangulated hernia, in which this operation was performed; twenty-seven recovered, and four died; the result of one is not mentioned. Certainly the amount of successful cases is unusually great, especially as three of the cases were of the umbilical form, all of which recovered.

Mr. Poland has related eighteen operations for hernia, in the "Guy's Hospital Reports" for 1843. In thirteen cases the sac was opened,—six recovered, and seven died; in five the sac was not opened,—three recovered, and two died. I think no surgeon reviewing the history of these cases could attribute the recovery or the death to the mode of operating; many of the cases, as too often happens, were admitted into the hospital in an almost hopeless state, much valuable time being expended in fruitless attempts to reduce the hernia, and others perished from obstinately refusing to submit to the knife until it was too late to afford a good prospect of success. Considerable difficulty will always arise in making a comparative estimate of the success of each operation, inasmuch as the duration of the strangulation can seldom be correctly ascertained. In this particular Mr. Teale's table is very imperfect. The pressure of the stricture on the delicate structure of the intestine, together with the rude manipulations to which the bowel is subjected in the employment of the taxis, is far more likely to produce a fatal termination than a clean cut into the peritoneal sac.

The late Mr. Hey, of Leeds, considered this operation very objectionable and never preformed it.

There is one class of cases, however, in which it is desirable to perform this operation,—namely, in large scrotal herniæ. In these cases, when the intestines are exposed and the stricture divided, considerable time is spent in reducing the contents of the sac; the long-continued manipulations often induce fatal inflammation, or the patient rapidly sinks from the combined effects of exhaustion and the shock of the operation. I consider Case IX to have been an instance in point. When the contents of the sac are intestine and omentum, the symptoms are not so urgent, and the danger of an operation is lessened, because the intestine is protected in a great measure from the injurious pressure of the stricture.

Another cause of failure is, that we are often obliged to perform the operation when inflammation has already attacked the abdomen. In a very large proportion of such cases death ensues. I consider such cases analogous to those in which the trephine is applied to the cranium, when inflammation has set in on the membranes of the brain. We are adding violence to parts already in a state of excitement, the operation fails to give relief, the bowels remain constipated, the sickness continues, especially if the inflammatory action has extended to the upper part of the abdomen, remedies are useless, and an agonizing death puts an end to the patient's sufferings. Case VII is an example.

I am convinced that all treatment prior to the operation for hernia might be dispensed with advantageously in a large proportion of cases occurring in hospital-practice; I have often seen much valuable time expended in preparing baths, &c. The urgency of symptoms must be our guide in each case.

Mr. Pott's opinion was, that the operation, when performed in a proper manner and in due time, does not prove the cause of death oftener than perhaps once in fifty times. And Mr. Hey observes, it would undoubtedly preserve the lives of many to perform the operation almost as soon as the disease commences. In young and robust subjects I have more confidence in a full venesection, and the application of ice, than in the use of hot baths. Mr. Pott, Mr. B. Bell, and Mr. Lawrence, are advocates for the use of the lancet; Mr. Willmer and Mr. Allanson, not only condemn the practice, but even attribute the fatal result, if an operation should be required, to the use of this remedy. Prevention is better than cure; and I fully believe that when inflammation has once attacked the peritoneum in a case of strangulated hernia, death is almost a necessary consequence, however skilfully the operation be performed. The indiscriminate use of any remedy in surgery, however useful, is sure to bring such remedy into disuse and disrepute. Mr Allanson tells us "that bleeding, 'ad deliquium,' had been the constant practice in Liverpool, and as soon as the deliquium happened the taxis was tried, during that stage, but I never saw it succeed;" and adds, "nor do I think bleeding even of the smallest service in forwarding reduction." Mr. Hey, of Leeds, whose practical observations on this subject have been seldom equalled, certainly never surpassed, after quoting the above-mentioned passage, says, "Amidst the contrariety of opinions what path must the young practitioner pursue? I entertain a favorable idea of all these authors, yet it is impossible that I should think them all right in these discordant sentiments. If I may be allowed to judge from my own experience, I must conclude this matter has been carried to an extreme on both sides." He relates two cases in which bleeding was followed by a speedy reduction of the hernia. On the whole, Mr. Hey's experience leads him to concur so far with Mr. Willmer and Mr. Allanson, as to declare, that bleeding has generally failed to procure a reduction of the strangulated intestine, but he does not agree with the former gentleman, in thinking that it generally renders the subsequent operation more dangerous. During my attendance at St. Bartholomew's Hospital, I saw cases of strangulated

hernia, in young and robust subjects, in which bleeding from the arm was practised previous to an operation being done, and the patient recovered without a bad symptom; perhaps they might have recovered equally well if the venesection had not been practised; nevertheless, I attribute the recovery, in a great measure, to the plan of treatment adopted. In Cases I, II, and VIII, it was practised with apparent advantage.

The treatment after the operation in the present age differs materially from that used in former times. I here remark that the cases first related were subjected to a different plan of treatment to that pursued in the subsequent ones. Aperients were given in a few hours after the operation with a view to procure evacuations from the bowels, but seldom succeeded, and it is very questionable whether they were even beneficial. Surely it is more common-sense practice to allow the system time to recover from the combined effects of a distressing disease, and a painful operation, and to give time for the re-establishment of the circulation in the intestine, than to irritate an already irritable and perhaps inflamed intestine, by the exhibition of aperient medicines, which can scarcely fail to excite vomiting and nausea. The opportunities afforded me of witnessing the effects of the one plan as compared with the other, are such as to impress my mind with the superiority of the soothing and sedative method. Purgative medicines and enemata are seldom required during the first thirty-six or forty-eight hours after the performance of an operation; as a general rule the less we do the better.

It would be far more to the advantage and the well-doing of our patients, if we were, in this as well as in other diseases, content to look on and watch them with a jealous eye, and imitate and assist the efforts which nature makes for the reparation of disease, than as too often happens, frustrate her operations by injudicious and meddling interference. The treatment generally most appropriate is to give a full dose of calomel and opium, and repeat it according to circumstances, and if the bowels do not act spontaneously within forty-eight hours after the performance of the operation, if the stomach will bear it, to give a dose of castor oil in a suitable vehicle. If this does not operate in the course of twelve hours, a common enema seldom fails to produce the desired effect, provided no inflammatory action exists in the abdominal cavity. Under such circumstances to persevere in the use of purgatives would be useless, our energies should be directed towards reducing such inflammation. Venesection to any extent is seldom required, and is not well borne after this or any other operation. Leeching the abdomen, freely followed by efficient fomentations, will answer better than the abstraction of blood from the arm. In a great proportion of cases calomel and opium are indispensable.

In Cases VIII and XIV it will be observed that the descent of the testes was incomplete. When called on to operate under such circumstances, it becomes a matter for consideration what course ought to be adopted in regard to the removal of the testicle. In Case VIII, the organ was partly within and partly without the external abdominal ring; and in Case XIV, it was completely within the inguinal canal; in both the pressure of a truss could not be borne, consequently the patients were exposed to the dangers of the hernia becoming again strangulated. Although this form of rupture has been noticed by Pott, Cloquet, and Lawrence, and more recently by Mr. Teale, I am not aware that any of these able surgeons have pointed out the line of practice which ought to be adopted when the operation is requisite. I conclude none of them could recommend the extirpation of the gland. In Case XIV, although neither testis was in the scrotum, the man informed me he was the reputed father of children.

Case X was a very interesting and embarrassing one; the symptoms were not such as are usually observed in cases of strangulated hernia. This case, with the succeeding one, will more properly come under the head of obstructed irreducible hernia; in both the contents of the sac were omentum and colon, and the symptoms resembled those of ileus, and were probably produced by the irritation and inflammation of the contents of the sac, for in neither instance did the symptoms undergo any alleviation after the performance of the operation. In fact the gut was not much constricted; nevertheless, if either had died without any operative proceeding being attempted, I should not have acquitted the surgeons of blame. Whether the exhibition of the pure mercury was really useful I am unable to determine; certainly the effect which followed was truly marvellous, and the bowels were immediately relieved.

While I was preparing this paper for publication, Case XIII presented itself, and the subject of the operation was the oldest patient I ever saw submitted to the knife; it turned out perfectly successful, and the time occupied for the healing of the wound was unusually short.

CASE OF LARYNGISMUS STRIDULUS; INHALATION OF ÆTHER: RECOVERY.

By W. E. Image, Esq., F.R.C.S., Surgeon to the Suffolk Hospital.

Master J——, aged one year, a very fine healthy child, but of full habit and teething, had suffered for several days with repeated attacks of crowing inspiration. On my first visit I found him apparently perfectly well; before I left the house, however, he had a very severe attack. The paroxysms were produced by the slightest mental irritation, and were sometimes so severe that he appeared quite exhausted and in a dying state for a considerable time after the cessation

of the paroxysm. The severity of the attacks daily increased. The crowing breathing was now succeeded by a state almost approaching to asphyxia. The gums were well and repeatedly lanced; the bowels well relieved by purgative medicines; leeches and blister to the nape of the neck, mustard to the legs, hot baths, and cold water to the head at the same time, with other remedies, were used, but without advantage. The attacks increased in frequency and severity. At length he had so severe a paroxysm that he remained two minutes and a half quite unable to breathe. His lips and face were purple; pupils dilated. The body became covered with cold perspiration, and he appeared to be dying. His recovery from this frightful attack was very prolonged. His intellect was not restored till the following day. It was now agreed to apply æther to the nose and mouth on the slightest approach of spasm. Two days after this attack he began to crow as before, and every appearance of a severe attack presented itself. Æther, poured on sponge, was instantly applied to the nose and mouth. The spasms increased for a few seconds, and then perfectly subsided, and the child was well again. For four days the spasms recurred, but were instantly overcome by the æther-vapour, and from that period the child has remained free from an attack, and is perfectly well.

I will not offer any remarks on the foregoing facts, but merely state my conviction, that the æther was greatly influential in preventing a recurrence of the dreadful paroxysms which had so nearly deprived my little patient of life.

Bury St. Edmunds, May 22, 1847.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF WILLIAM SANDS COX, ESQ.

By Peter Hinckes Bird, one of the Resident Medical Officers.

(*Continued from page* 237.)

Case XXIX.

CARBUNCLE.

Mary Ann Moss, aged 42, housewife, married, admitted August 11th, 1846, into the Queen's Hospital, under the care of Mr. Sands Cox. She states that about three weeks ago she first perceived a circumscribed, livid, red swelling on the back, she opened it with a needle, but no matter came out; a hard immoveable scab formed over it; it gradually increased in size, and caused her much pain; pain described as gnawing, pulling, "as if the flesh were torn from her;" when it had attained the size of her fist, which was about a week since, it broke into a number of small holes, which discharged a large quantity of whitish thin matter, the pain being considerably relieved. Her health has been very indifferent lately; she has been in a weak condition for some time; has had ten children, four of whom are living; had difficult labours with them all, especially with the last; she lost a considerable quantity of blood in her last labour; has been much troubled with headache, described as if "something was hammering in her head," accompanied with singing in the ears and palpitations; has frequently "turned faint;" is not subject to cough. Has had poultices applied lately.

Present State.—There is a large ulcer, rather larger than the bottom of a wine-glass, situated in the right lumbar region, about three inches from the spine; it contains a mass of mortified cellular tissue, of a brownish grey colour; the integument round the edges of the ulcer is of a dusky-red colour, and has a peculiar feel, like that of brawn; the ulcer discharges a thin brownish matter, mixed with strings of a yellowish colour; she complains of but little pain in it now; it is present at times as a slight gnawing pain; she has a pale anæmic look; pulse 90, very weak, easily compressible; tongue moist, of a whitish colour; she complains of a nasty bitter taste in the mouth; appetite indifferent; bowels open; sleeps pretty well at night; also complains of beating pain in the head; the urine was of a light colour, and of natural quantity; it was examined for sugar by the usual tests, but not a trace could be discovered.

Ordered to have a large linseed poultice applied three times a day, and the following mixture:—R. Decoct. Cinchon., oz. viij.; Tinct. Cinchon., oz. ss. M. Sum. oz. iss, ter die.

14th. A large mass of mortified cellular tissue was discharged in the poultice yesterday; the ulcer discharges a thin, lightish-brown, not offensive, matter; she feels better; appetite improved. To have extra diet.

16th. The ulcer is quite free from mortified cellular tissue, and presents an uneven deep excavation. Ordered to have it filled up with dry lint, and covered by strips of adhesive plaster, so as to bring the edges of the wound in rather closer apposition.

R. Quinæ Disulph., gr. xij; Acid. Sulph. dil., dr. j; Aquæ puræ, oz. viij. M. Sum., oz. iss, ter die. Continue the extra diet.

18th. Feels stronger; appetite very good; bowels regular; tongue clean; sleeps well. Continue medicine.

21st. Improving; tongue clean; pulse stronger; bowels open; complains of dull pain over the eyebrows. Continue medicine.

24th. Getting stronger; no pain in the head; is not troubled now with palpitations; the wound looks healthy, and is filling up.

September 1st. Doing well; the granulations are rather indolent; health good; feels stronger. To have the ulcer dressed with lint dipped in a solution of sulphate of zinc.

12th. Much smaller since last report, but it has not made much progress towards healing within the last few days. Ordered to be dressed with the Lotio Nigra.

18th. Improving rapidly.

26th. Quite well; health much improved; no palpitations nor headache. Discharged cured.

Anthrax, or common carbuncle, resembles furunculus

in being attended with gangrene of the subcutaneous cellular tissue; it is remarkable for constituting a dark, red, or livid swelling, accompanied by burning heat, pain and stiffness in the part. It most frequently occurs in those parts of the body where the skin is thickest, and abounds most in those processes of cellular tissue which are described by Dupuytren* as extending between its areolæ. Thus the nape of the neck, the back, the spaces over the scapulæ, the sides of the chest, and the nates, are the most frequent situations of anthrax. In this case its seat was in the lumbar region, which is of rather rare occurrence.

According to Dr. Carswell,† the great accumulation of blood, and the still greater and rapid effusion of serosity which takes place in the circumscribed, acute, inflammatory affections, produce a state of extreme induration of the cellular tissue, a greater or less portion of which, being thus as if strangulated, dies from want of nutrition, becomes separated from the living parts, and is expelled in the form of a grey or straw-coloured spongy or pulpy mass, through an opening made in the skin by a similar process, by ulceration, or by a surgical operation. Besides the production of gangrene and disorganization of the subcutaneous cellular tissue, there is sometimes a destruction of even the subjacent muscles and deeper textures.

Carbuncle is mostly seen in persons beyond the middle period of life whose constitutions have been seriously impaired by some cause. In this case the patient was past 40 years of age, and had been enfeebled by the number of children she had given birth to. The carbuncle also was here of tolerable size; but cases have occurred in which it was as broad as a dinner plate.

As this disease most frequently occurs in persons of a bad constitution, a tonic plan of treatment must be pursued; bark, wine, and a nourishing diet, must be given. With regard to the local treatment, it consists in affording a free escape to the sloughs and matter; a crucial incision is to be performed, but in this case an opening sufficiently large existed for the escape of the mortified cellular tissue.

* "Clin. Chir.," Vol. iv, p 109.
† "Illustrations of the Elementary Forms of Disease," p. 7.

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, JUNE 2, 1847.

The Quarterly Return of Health and Mortality lately issued by the Registrar General, contains, as usual, much valuable information connected with the public health. The effect of severe weather is strongly marked, and, together with the high price of provisions, has tended greatly to increase the mortality. "Winter," it is observed in the report, "appears to be the season in which it is most natural for man to die. For many years the number of deaths in England has been highest in the winter, and lowest in the summer, quarter. In the summer quarter of 1846, the reverse was observed; the mortality was greater than it had been in any quarter of the seven preceding years; and in the last winter quarter, ending March 31, 1847, *fifty-six thousand one hundred and five* persons died in the districts which make the returns; a number greater than has been registered in any corresponding quarter, and *six thousand and thirty-five* above the corrected average."

It will be recollected that the winter of 1845-6 was remarkable for its mildness, as well as for the smaller amount of its mortality; and a comparison of the winter quarter (January to March,) of the two seasons, 1846 and 1847, will place the effect of cold on the mortality in a still more striking point of view. We have seen that the excess in the number of deaths in the quarter just ended, above the calculated average is 6.035; the decrease in the corresponding quarter of the year 1846, was 5.359. The difference between the two therefore amounts to 11,394, or upwards of one fifth of the entire mortality of the selected districts. Whatever effect, however, the severity of the weather may have had in producing this large increase in the mortality, the number of deaths cannot but have been greatly augmented by the want of sufficient nourishment for the poorer classes. The high price of provisions must have operated, both directly in a diminution of the supply of food, and indirectly in putting it out of the power of the necessitous to procure sufficient clothing, fuel, and other comforts, necessary to protect them against the inclemencies of the season. This indirect action of the scarcity has perhaps been more immediately felt than the deficient supply of food itself, as the increased mortality appears very generally to have been owing to imflammatory affections of the lungs and bronchial mucous membrane, the effects of cold on the aged, on children, and on weakly persons, &c.

One of the causes of a high mortality dwelt upon at considerable length in the Report, is the great sacrifice of life, and of infant life especially, from the want of sufficient sanatory regulations in the larger towns. The injurious effect of an impure atmosphere on the health of the metropolis is especially dwelt upon, and the distribution of this atmosphere, "not a gas, but a sort of atmosphere of organic particles, undergoing incessant transformation; perhaps like malaria, not odorous, although evolved at the same time as putrid smells; suspended like dust, an aroma, vesicular water in the air, but invisible," hanging like a "disease-mist," in various degress of density over different

parts of the vast city and its extended suburbs, is forcibly marked out. "This disease-mist, arising from the breath of two millions of people, from open sewers and cess-pools, graves and slaughter houses, is continually kept up and undergoing changes; in one season it is pervaded by cholera, in another by influenza; at one time it bears small-pox, measles, scarlatina, and hooping-cough among young children; at another it carries fever on its wings. Like an angel of death it has thus hovered for centuries over London." And though this disease-mist is not, perhaps, to be altogether "driven away by Legislation," as affirmed in the sanguine language of the Report,—its density, its manifold noxious impregnations, may undoubtedly be lessened, and its health-destroying influences circumscribed. "The poisonous vapour may yet [in part at least,] clear away from London, and from all the other towns of the kingdom;" and "some of the sunshine, pure water, fresh air, and health of the country" become also the portion of the inhabitants of towns.

Before concluding these observations, we would direct attention to the valuable remarks on the weather by Mr. Glaisher, of the Greenwich Observatory, appended to the return. The severe cold experienced in the week ending the 14th of February, and the extreme degree of this on the 12th, in certain districts only, was, according to the Report, confined to a zone, the southern limit of which was in latitude 50° 45, and the northern limit, in latitude 52°. This cold was most severe at Uckfield, the thermometer falling there, according to the observation of Mr. Prince, as low as 1°; at Blackheath, the lowest point of the thermometer on the same day was 6°, at Beckington, in Somersetshire, 5°, and at Romsey, Hants, as appears from Mr. Buckell's report, published in this Journal, it was 6°. It is worthy of remark that the lowest point of the thermometer observed during the month, both at Sidmouth and Honiton, was on the same day of the month, the 12th, though the amount of depression, as recorded by Dr. Cullen and Mr. Rogers, was very different, being in the latter place to 18°, and in the former not lower than 21° 5.

Review.

The Construction and Government of Lunatic Asylums and Hospitals for the Insane. By JOHN CONOLLY, M.D., Fellow of the Royal College of Physicians of London, and Physician to the Middlesex Asylum at Hanwell. London: 1847. 8vo. pp. 183.

This is a small and unpretending volume, but at the same time, one of those rare productions which leaves little of material import unsaid on the subject of which it treats, and contains no redundancies, either of matter or expression. The enlightened views known to be entertained by Dr. Conolly, on the subject of the management of the insane, the deep attention which he has paid to the subject, and the genuine benevolence which his published sentiments, his public acts, and his private intercourse alike evince, render such a treatise as the work before us a work of no ordinary interest. The interest is not confined to the physician, but must be equally participated in by the general philanthropist, the magistrate, and the public at large. Happily it is unnecessary in these days to dwell on the general truth and practicability of those humane principles in the management of the insane, the working of which, the labours of Dr. Conolly have so much contributed to advance; but there are numerous minor points which yet require consideration connected with the best mode of carrying these principles into operation, and on these the present work affords much valuable information and instruction. By those to whom the general and medical treatment of the insane is confided, the opinions of Dr. Conolly cannot but be perused with great interest, and the correctness and applicability of his views will be tested by the results of their own experience. But there are persons whose duty it is no less to investigate the several questions connected with the management of asylums for the reception of insane patients, who have no previous instruction on the subject, neither from practical experience nor education. To county magistrates particularly such information as is here conveyed is of great importance, and we trust that the valuable observations of the author will have extensive circulation among the magistracy of the country, that while all due economy in the appropriation of public funds to the care of the insane is practised, no miserable parsimony may be suffered to cripple the efficiency of a system of general management, which has converted the receptacles for lunatics from gloomy and desolate prisons, into cheerful habitations, into hospitals for the curable, and into places of refuge and homes for those whose mental condition admits not of restoration to health.

The following eloquent passage in which the duties of the Superintendent are briefly summed up, glowes with the purest sentiments of humanity and benevolence, and in every sentiment will be recognized by our readers the impress of the author's mind:—

"None," says Dr. Conolly, "but those who live among the insane can fully know the pleasures which arise from imparting trifling satisfactions to impaired minds; none else can appreciate the reward of seeing reason returning to a mind long deprived of it; none else can fully know the value of diffusing comfort, and all the blessings of orderly life, among those who would either perish without care, or each of whom would, if out of the Asylum, be tormented or a

tormenter. Constant intercourse and constant kindness can alone obtain their entire confidence; and this confidence is the very keystone of all successful management.

"Thus living, and thus occupied, the director will learn to love his people, with all their infirmities, which are their afflictions. The Asylum is his world. The patients are his friends; humble, but not without even delicate consideration for others; wayward, but not malignant, except when cruelty exasperates them; capricious, but not ungrateful; distrustful, but to be won by candour and truth; disturbed and grievously afflicted, but not dead to some of the best and purest affections. He will almost regard his patients as his children; their cares and their joys will become his; and, humanly speaking, his whole heart will be given to them."

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

March 6th, 1847.

Dr. Fletcher in the Chair.

TUBERCULAR DISEASE OF THE PERITONEUM.

Mr. F. Elkington presented to the Society a specimen of tubercular disease of the peritoneal coat of the stomach, and gave the following history of the case:—

Margaret Robins, 65 years of age, a native of Wales, came to England when 16 years of age. Her mother died in a fit at the age of 23. Her father died when she was about four years of age, of an acute disease. Has been married twice; her first husband died eight years after their marriage. In 1813 she was married to her second husband, who died of lupus, in March, 1846. From her account it appears that she had during early life, an attack of pleuritis, and two large abscesses just above the crest of the right ileum, the cicatrices of which are still remaining. Has never had scarlet fever, typhus fever, small pox, &c.

August 1st. 1846. She considers the present complaint to be of about six years' standing, during which period the following symptoms seem to have been gradually increasing in severity:—Violent spasmodic pain in the side (sometimes the right, and at others the left,) on the slightest exertion, or on taking certain articles of food; a sensation of *pain after eating, and sometimes vomiting*; violent palpitation of the heart, constipation, and depression of spirits. *Present* appearance is as follows:—*Countenance* exhibits great anxiety of mind; cheeks depressed; features contracted, with slight hectic flush upon the malar bones.—*Tongue* coated with a deep white fur in the centre, and a brownish one round the margins, *tremulous*.—*Pulse* 100, small and compressible.—*Chest*-sound, healthy; no cough nor pain over the region of the chest; *heart's* action quick but natural.—*Abdomen*: no tumour to be discovered by the hand; complains of violent pain over the whole region of the stomach, increased upon pressure; constipated bowels; scanty high-coloured urine.

Treatment.—I ordered eight leeches to be applied over the region of the stomach, and after their removal a blister, a saline mixture every four hours, with two pills composed of Pil. Hydrarg., Extr. Colocynth., et Hyoscyamus, at *bed-time*. By this treatment the pain over the stomach became much diminished, and by omitting the saline medicines, and giving tonics, (vegetable,) together with the pills, her general health was much improved, and after three weeks from the time of my first visit, she requested me to let her go to Tamworth. This request was complied with, and I lost sight of her until asked to see her in February, 1847, when I found her in a dying state, with suppression of urine, distended abdomen, and vomiting of fœtid matter. She died three days after this, and on the fourth day I performed the *post-mortem* examination.

At the particular request of her friends, the abdomen alone was opened. External appearances:—The whole of the body extremely emaciated; cheeks sunken; abdomen enormously distended. On the left side above the crest of the ilium were two large cicatrices, which had been evidently formed by the healing of abscesses. On opening the abdomen, at least a gallon of fluid was evacuated from between the layers of the omentum. On examination superiorly, the liver appeared of full size, of rather darker colour than natural, overlapping the stomach, which appeared contracted to the size of the closed fist. The gall-bladder was full of bile, which was of a natural colour, and on making a section into the liver it presented the appearance usually seen in what is termed a nutmeg liver. Nothing else remarkable was observed in this organ. The stomach was surrounded and firmly adherent to the gastro-hepatic omentum, which presented a scirrhous appearance, with little spots of tubercular matter of a pinkish colour interspersed in various places. After separating the stomach from its attachments at the pyloric and œsophageal extremities, and removing the omentum as far as was practicable, the most remarkable feature was its extremely contracted size; hardness on its external surface; both anteriorly and posteriorly were large deposits of a pinkish colour, one in particular posteriorly, and nearly the size of a nut, which at this period had quite a calcareous appearance; the internal surface presented the same appearances as in the specimen. The small intestines from the duodenum to the extremity of the ileum, presented quite a dark appearance, which on more minute examination appeared to be owing to deposits similar to that on the coats of the stomach. The colon was empty and had these deposits only in its transverse portion; none were discovered in the rectum. The spleen was in a natural state, without deposits; nor were any discoverable in the pancreas which also assumed its natural appearance. The kidneys were of the usual size, very firm and hard to the touch; on making a transverse incision the pelves appeared dilated, and no distinct line of demarcation could be traced between the cortical and medullary portions, for the former encroached on the latter, and one was blended with the other. The ureters were much dilated, but more at the renal than the cystic extremities. The coats of the bladder were thicker than natural, but no deposits could be traced on them.

similar to those in the other viscera. The uterus was not opened. The peritoneum in the upper part of the abdomen was healthy; the lower or pelvic portion contained the pinkish deposits, easily recognized after being washed in water.

OBTURATOR HERNIA.

Mr. Hill brought before the meeting a sketch of a hernia of the obturator foramen, and gave the following description of the case:—

Ann Mills, aged 72, an unmarried female, of spare habit, was suddenly seized on Friday, 18th of February last, whilst at dinner, with a feeling of depression, which obliged her to lie down. She did not then complain of much pain, but gradually became worse until the following Tuesday, when I was requested to see her. I found her suffering from obstinate constipation, accompanied with vomiting and great depression. She complained also of tenderness in the belly, referred chiefly to the right iliac region. There was no fullness in either groin nor in the left lumbar region. She gradually became worse; she vomited matter acquiring a stercoraceous character, and at last having a black colour. She died on Friday, the 25th.

On examination *post mortem*, we found the small intestines much distended, and on tracing them downwards, the hand was directed to the right obturator foramen, into which a small knuckle of the ileum had passed. The portion strangulated did not comprise the whole calibre of the gut, but the obstruction to the passage of its contents was complete. The intestine above this part was gangrenous, and burst on the slightest pressure. Below the constricted portion the canal was quite empty.

SHEFFIELD MEDICAL SOCIETY.

Sixth Session.—Fourteenth Meeting, April 1, 1847.

The PRESIDENT in the Chair.

SCIRRHOUS UTERUS.

Dr. Branson exhibited a scirrhous uterus which had been sent to the Museum of the Infirmary by Mr. Boddington, of Chesterfield. The patient complained of leucorrhœa two years ago, but last July it was found to be carcinomatous disease. The pain was unusually severe and required most powerful anodynes. She died very much attenuated. On inspection the os uteri was scarcely implicated. The patient was forty years of age and had borne six children.

NECROSIS OF THE ACROMION SCAPULÆ.

Mr. H. Jackson exhibited a portion of necrosed acromion, removed from the shoulder of a man aged 27, by trade a comb-maker, but who had for six years been a sailor. About a year and a half ago he complained of pain in the shoulder, which he took to be rheumatism, and used stimulating liniments with temporary relief. About eight months ago he rubbed it with hot turpentine and mustard, which produced ulceration, and several small portions of bone came away. The ulcers then cicatrized, but about three months ago re-opened, and the bone then became exposed, and finally about an inch was removed.

Dr. Shearman exhibited Dr. Simpson's instruments for the exploration of the uterus.

ÆTHER-INHALATION.

Mr. Law exhibited a portable apparatus for the inhalation of æther, registered by Atlee and Company.

Mr. Michlethwait read from the "Veterinarian" for April, 1847, an account of an experiment with æther vapour on a horse, conducted by Messrs. Henderson and Cherry, which terminated fatally in six minutes. The diaphragm and aorta at its commencement were both ruptured, but the case was of general interest, as bearing upon the subject of æther-inhalation.

CASE OF MANIA.

Mr. Ray detailed the particulars of a case of mania, occurring in a lady, aged about 30. The mania appeared to be the result of anxiety and distress, resulting from the illness and death of an intimate friend, to whom a promise was made of a strict observance of religious duties, and the delusion consisted in the idea that she had broken the promise, and was condemned in consequence, to exposure in a state of nudity, without food, in the open streets. All the functions were healthy. All reasoning was fruitless. But the use of blisters, and tartar emetic both inwardly and externally, produced in five days the desired effect. The case was of interest inasmuch as the mania yielded to the treatment much more rapidly than might have been expected, or than is usual. The patient has since continued perfectly well.

Dr. Shearman read a paper "On Certain Non-malignant Tumours of the Uterus," which he illustrated by microscopic drawings made by Dr. Branson. This paper will appear in another number of the Journal.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES, PARIS.

March 22nd.

ÆTHER INJECTED INTO THE ARTERIES.

M. Flourens related experiments in which he injected æther into the arteries. He states that it does not produce the phenomena of *ætherization*, and that neither does the injection of æther by the stomach. This he has repeatedly ascertained.

ACTION OF ÆTHEREAL VAPOUR COMPARED WITH THAT OF THE NON-RESPIRABLE GASES.

MM. Preisser and Melays, of Rouen, related experiments to prove that a cessation of the pulmonary changes of the blood is the explanation of æthereal insensibility. They have ascertained—1. That arterial blood always becomes dark under the effects of æther. 2. That this change precedes the insensibility. 3. That after the æthereal inhalation was suspended, the arterial colour of the blood is restored previous to the return of sensibility.

In order to determine whether the mere privation of oxygen is sufficient to produce insensibility, they caused animals to inhale nitrogen, protoxide of nitrogen, &c., and found that in all insensibility was preceded by a dark colour of the arterial blood, and that a return to

its normal colour preceded the return to sensibility. From these data they decide that æther simply asphyxiates.

March 29th.

WOUNDS OF THE STOMACH CONSIDERED IN REFERENCE TO THE OPERATION OF GASTROTOMY.

M. Sedillot presented a memoir in which he not only maintained the curability, but the harmlessness of wounds of the stomach, when made with proper precautions. The operation of opening the stomach, and making a permanent fistula, has been proposed in cases of obstruction of the œsophagus.

The meeting was subsequently occupied by some unimportant communications on æther.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE, PARIS.

March 23rd.

INHALATION OF ÆTHER.

M. Blandin occupied the attention of the meeting with a retrospect of the experience connected with æther-inhalation. As many others have done, he considered the effect of æther to be analogous to that of alcohol, and admits with Longet separate steps in the insensibility. In the first, he maintains that there is always a certain amount of excitement. In the second insensibility declares itself in a marked degree; the patient experiences a sensation of weight in the head, giddiness, and noises in the ears. In some, prostration is complete; in others a tetanic spasm is induced. Some shed tears; others exhibit a mental emotion indicated by smiles. At this time the influence of the æther is confined to the cerebral lobes; the patients are still sensible to pain, but on emerging from the æthereal trance they have lost all memory of it. In the third period, that of *ætherization of the protuberance*, of Longet, the scene changes; excitement is succeeded by insensibility, the life of relation is suspended, reflex action is abolished, the pulse is lowered, the blood loses its florid colour. This is the extreme point to which the inhalation can be carried with safety; but the condition may be prolonged by management, or the patient may be allowed to recover himself, in which latter case he passes reversely through the same stages. If, continues M. Blandin, we are to believe the first experimenters with æther, none but pleasurable sensations are excited; but we cannot deny that the contrary is frequently the case. It is certain, however, that the æthereal delusions, are often in correspondence with the ages and circumstances of the patient: the little child dreams of its playthings;—the lascivious woman believes herself in the embraces of her lover, and her motions not unfrequently indicate the sensations of venereal enjoyment;—the religious enthusiast dreams that she is in heaven, &c., &c. Be it as it may, the effect is transient, though not so transient as is supposed. In fact, the fluids and solids are penetrated with the æther, as the breath and urine testify many hours after. In some cases we have known headache persist during the day, and in others we have seen so much cerebral congestion as to require blood-letting.

M. Blandin proposes two questions of paramount importance, viz.:—1. *Can death be produced by the inhalation of æther?* 2. *Is the fatal event far removed from the point of obsolete sensibility.* It is impossible, he says, to doubt that the former question may be answered in the affirmative. The fact is proved by physiological experiments, that if the action of the æther be carried beyond a certain point, the respiratory tract is paralysed and death ensues. In answer to the second question, M. Blandin remarks, that in rabbits, perseverance in inhalation for four or six minutes after complete insensibility, destroys life.

MEDICAL REGISTRATION BILL.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

As an old member of the Provincial Association, may I be permitted to ask you to insert in an early number of the Journal, the following brief observations upon the state of the medical profession, both in relation to its benefits towards the public, as well as to the honour and dignity of the science of medicine and surgery.

I consider the present time one peculiarly adapted for every member of the medical and surgical profession, to offer his conscientious opinions upon the present state of his profession, and that, without the fear or intention of giving offence to any one. I am quite aware that it is a subject that may give umbrage to some parties, however guarded one may be in giving vent to one's feelings. The numerous and conflicting interests and opinions of the profession are such, that it is beset on all sides with great difficulties, but if we all consider the subject as one in which the public are intimately interested, and argue that it is for their benefit, it will in a great measure divest it of any feeling of self-interest.

No one will doubt for a moment, that society must derive a much greater advantage, if the whole of the members of the medical profession are thoroughly well educated. It must therefore be most desirable that none should be allowed to practise but those who are legally, and at the same time practically, well fitted; and what will tend to accomplish such an end but a strict registration, combined with an examination, so that every one who enters the profession, shall be both theoretically and practically educated, of which the public should have some guarantee. The Bill recently introduced into the House of Commons by Mr. Wakley, contains everything that will ultimately accomplish that end. There are certain influential bodies that no doubt will be opposed to such a system; because it will tend to raise the standard of the profession generally, the public will feel more confident in their usual medical attendant, which would interfere very much with the private interests of those immediately connected with the public institutions of this country. But, in a *public* point of view, *private* interests ought not to weigh one atom in the scale. As far as the legislation is concerned, anything and everything that tends

to raise the standard of the profession in this country, would confer a great blessing on the public, and particularly upon the middle and poorer portions, which form at least two-thirds of the whole. Ought not the surgeon who is about to practise in the remote parts of England, Scotland, or Ireland, to be as well informed as he who practises in any of the cities or large towns? The middle and poorer classes have not the means of applying to those who are supposed to be the leading men in the profession; and pray what is to become of them? Are they to be permitted to suffer and die, because the private interests of a few influential persons connected with our public institutions would be interfered with? If every medical man was thoroughly well *qualified* to practise, it would not be a matter of so much importance to the poor, who require medical and surgical attendance under the Poor Law, for then, in all probability, union medical officers would be sufficiently well paid, to do justice to the cases under their care; but as the law now stands, there is too much reason to believe that much suffering, as well as the loss of many valuable lives, is constantly occasioned by the present mode of dealing with union medical officers. It therefore becomes the duty of every medical practitioner to rally round the greatest benefactor both to the public, and to the profession, by petitioning and by explaining to the various members of Parliament, the necessity of supporting the Bill now before the House. It has already been assailed, and every nerve will be exerted by the institutions of this country to oppose its passing into a law;—and for what reason? Simply because such a Bill would go far to equalize the standard of the professsion, and do away with the necessity of having recourse to expensive consultations. It therefore becomes a question as much for the consideration of the public, as of the profession; and I hope that every scientific practitioner will spare neither time nor pains to forward the passing of the Medical Registration and amended Medical Bill.

I am, Sir,

Your most obedient Servant,

GEORGE BOTTOMLEY.

Croydon, May 20, 1847.

TOTAL ABSTINENCE AND MEDICAL TESTIMONY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOUNAL.

SIR,

I beg leave to trouble you with a few observations on a letter by Mr. Edward Humpage, of Bristol, in your last number.

The position which in my former letter I ventured to defend was that of temperance, *versus* abstinence, and I thought I gave *sufficient reasons* for our pausing before we commit ourselves to a professional opinion in favour of extreme views on a subject of great social importance. These reasons are at least conclusive to myself as regards the erroneous character of the views in question. I was far from supposing that my observations on this subject were calculated to excite a single angry feeling. I innocently supposed, that although various distinguished members of the profession have given a qualified opinion in favour of total abstinence, it did not argue any great presumption, or as Mr. Humpage avers, "want of good taste," to dissent from and controvert such opinion. That cause is seldom very good, or its advocates very judicious, which seeks support in the *argumentum ad verecundiam*; whilst, however, I shall not give place to Mr. Humpage in a just reverence for the real masters of medical *art* and *science*, I shall certainly not resign my right of investigating and judging for myself, nor shall I shrink from giving my opinions to the profession and to the public, as I may think desirable.

I have not the least reason for believing, that the opinion of which Mr. Humpage is the vindicator, is really entertained by any considerable number of observing and experienced physicians and surgeons; but, were this even the case, and had a much larger number of the names, *collected* by Mr. Dunlop, been as deservedly eminent as those *selected* by Mr. Humpage, I cannot admit that I am to be adjuged guilty of any disrespect in submitting to the profession those views which appear to me to be correct.

Your correspondent is pleased to characterize my observations as absurd and ludicrous, but, thus regarding them, I can only express my surprise that he has taken the trouble in any way to notice them.

Mr. Humpage asks which of the four statements in the declaration before us I consider so rash and dangerous? To this inquiry I answer, that I regard every one of them as *unproved;* and, so far, consequently, as rash and dangerous. I shall not trouble your readers with my reasons for this opinion, as these may be, to a great extent, gathered from what I have stated in my former letter. I may, however, observe that, before I could append my name to such a document, I should require such modifications in each statement, as would leave the declaration one in favour of temperance, rather than abstinence. I will state the more important of these modifications. In the first statement, the substitution of the word "abuse" for "use;" in the second, the insertion of the word "frequently" before "compatible;" and in the third, that of "generally," before the phrase "with perfect safety." As regards the fourth statement, I will merely observe, that believing as I do, that there are great numbers of persons to whom stimulants of some kind are not merely unobjectionable, but even necessary for health and comfort, I could not accept it in its present form.

There are, on the other hand, many persons, as I freely grant, for whom total abstinence from fermented liquors is, both on physical and moral grounds, desirable. Granting this, however, I must still resist the conclusion that we are called upon, by any consistent standard of morals, to banish wine and other fermented liquors from the *materia dietica*, and to restrict them to the *materia medica*, much less to exclude them, as some enthusiasts in the cause of abstinence desire, from the catalogue even of medicinal agents!

As regards the views of Liebig and Mitscherlich, Mr. Humpage has altogether misrepresented my object, in alluding to them. This object was simply that of shewing, that the prevailing doctrines in vital chemistry

do not justify the conclusion that fermented liquors are necessarily injurious to man; on the contrary, it would appear, that these fluids, like starch, sugar, fat, and the non-azotized ingredients of our food, minister not to the *nutrition* of the body, but to the *development of animal heat, and to the protection of the organism from the action of the atmospheric oxygen*,—objects scarcely second in importance to nutrition itself. Mr. Humpage refers to Liebig's "Familiar Letters on Chemistry," as favorable to his views. A reference to them will, however, shew, that the statements they contain are identical with those in the larger work from which I have quoted.

I shall not follow Mr. Humpage farther in his somewhat angry comments on my letter. Which of us has the greater cause for the disturbance of our equanimity I will leave to you, Mr. Editor, and to your readers to determine. My object has been that of attracting attention to a subject which I regard as important alike to the public and to the profession. I was aware that unworthy means have, in some instances, been resorted to, in order to procure signatures to declarations of this kind; and I thought that a caution on this subject, as regards some members of the profession, might not be altogether without its use. Whether this be the case or not, I must leave your readers to decide; but I must altogether disclaim the imputation of giving oracular cautions to the distinguished men alluded to by Mr. Humpage.

If I have not written in *propriâ personâ* on this subject, it has not been in order to express opinions which I am not ready to avow, on all proper occasions. I had no discoveries to communicate which called for the authentication of a name. I was dealing with old and well-known facts, and I was desirous that my observations, however they may be estimated, might neither lose weight, nor find adventitious support, from personal considerations.

Before concluding this letter, I will take the opportunity of expressing a hope that the members of the profession will render all the assistance in their power to Dr. Bowring, in his legislative attempt to procure the repeal, or at least, the large reduction, of the duties on foreign wines. By such a measure, particularly as regards the wines of France and Germany, the cause of temperance, and of hygiene, (in so many points identical,) cannot but be materially advanced. Another matter, which seems to call for renewed attention, is the exposure of that abominable system of adulterating and mixing wines, which exists on so large a scale in this country. No practitioner of experience can doubt the evils which arise from the extensive admixture of brandy with the port and sherry ordinarily consumed in this country, but the demand for which would greatly diminish, were the duties on other wines reduced to a more reasonable rate.

I am, Sir,

Yours respectfully,

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[This letter was intended to be inserted in the previous number, but was unavoidably delayed.]

MEDICAL TESTIMONY IN FAVOUR OF "TOTAL ABSTINENCE."

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

Sir,

It is not my intention to embark in the controversy now subsisting betwixt Mr. Humpage and your accomplished correspondent θ, nor is it my purpose to discuss, except collaterally, the merits of teetotalism—a system which I know many well-meaning and sincere persons devoutly believe to be the greatest moral and social reformation of modern times; whilst the rest of the world look upon it as an egregious piece of folly, or, at best, as an ephemeral bubble, blown up into a popular "movement" by the restless egotism of this busy and self-relying age. My chief object in now addressing you is, to analyse the four propositions put forth by the advocates of total abstinence, and to consider whether the members of our profession are justified in signing them, consistently with physiological truth, and with a due regard to their own reputation, as men of science, and men of sense.

Permit me to copy, and to comment briefly upon these four propositions, in their order.

1*st*. "*That a very large portion of human misery, including poverty, disease, and crime, is induced by the use of alcoholic or fermented liquors, as beverages.*"

This is sophistically, or, I might say, artfully put. What is here asserted of the *use* of alcoholic drinks, can only be true of their *abuse*. But surely, "*ex abusu non arguitur contra usum.*" Whoever, therefore, signs this axiom, worded as it is, signs what is not only untenable, but false;—in my opinion false, both in a physiological and vernacular sense.

2*nd*. "*That the most perfect health is compatible with total abstinence from all such intoxicating beverages, whether in the form of ardent spirits, or as wine, beer, ale, porter, cider, &c.*"

This is partly true; but only partly so. No doubt, in sound and robust persons, "perfect health" may be maintained under almost every variety of diet; but can the same be said of the feeble, the leuco-phlegmatic, and the aged, and more especially of those who labour under the congenital misfortune of a strumous constitution? Have the eminent medical characters, who have signed the above sweeping aphorism, never had occasion to order wine, porter, or ale, to the scrofulous, the emaciated, or the atrophic? If they have so done, is there not some inconsistency in their signing such a document as the above? They may, perhaps, say that they have ordered alcoholic beverages, in such instances as *medicines*. But this will hardly avail them as an excuse; for medical men do not generally order, even as medicines, things that they believe to be intrinsically hurtful.

3*rd*. "*That persons accustomed to such drinks may, with perfect safety, discontinue them entirely, either at once, or gradually, after a short time.*"

This, like the preceding, is only partially true. The young or vigorous may, probably with safety, lay

aside all stimuli; but there are many who could not take such a liberty with impunity. The system will not always bear sudden revolutions of diet, whether from moderate indulgence to total abstinence, or *vice versa*. Most constitutions will suffer more or less, from the revulsion. It has been said that "men are mere machines," but those who try abrupt experiments of this kind, will be apt to discover the contrary to their cost. I could cite more than one instance of persons who had lowered their vitality to such an extent by uncalled-for "pledges" of teetotalism, (I say uncalled-for, because these persons had never been otherwise than temperate,) that they succumbed almost without resistance, to the casual attack of some illness, which ought not, and under ordinary circumstances, would not have proved mortal.

4th. "*That total and universal abstinence from alcoholic liquors would greatly contribute to the health, the prosperity, the morality, and the happiness of the human race.*"

This is sheer declamation, or at least, a begging of the question. Its logical value in the way of argument, is not worth a rush! Might it not be affirmed with as much, or even more truth, that "the universal and rational enjoyment of alcoholic liquors, in common with the other comforts of civilized life, would contribute to the increased health, prosperity, and happiness of the whole human family?"

After what has been advanced, I need scarcely say that I, for one, would steadily decline (however, and by whomsoever importuned,) to affix my name to the above propositions. But do I condemn those who, judging otherwise, have thought fit to sign them? Certainly not. I am aware that men's minds ever vary,—that what seems true to one, seems false to another, exactly according to the point of view in which things are looked at. I well know that there is scarcely a subject under heaven, great or small, on which a discrepancy of opinion does not exist; so much so, that a sincere inquirer often feels no little mental perplexity, and is tempted to ask with Pilate, not scoffingly, but mournfully and despairingly, —"What is truth?" Since, then, there cannot be unbroken unity, let there at least be unbounded charity, amongst us. "Are we not all brethren?"

But without reference to the signing of the above four propositions, a graver question remains behind, namely, as regards the real *tendency* of teetotalism. Is it a popular movement of such a nature as to deserve the countenance and sanction of the medical profession? I humbly think not. I am deeply distrustful of all schemes of human reformation that are not based on the higher motives and feelings of our nature. I deliberately think that Christianity is the only influence that can have sufficient power and authority to control the passions, or to amend the conduct of the mass of mankind. I do not approve of fanciful and fragile human devices, like the ostentatious *pledge* taken in public, (with its usual accompaniments of popular applause,) usurping the place of law and gospel, and claiming an amount of authority at least equal to that of religion itself. It requires no extraordinary sagacity to foresee what the ultimate issue of all this must be. "It is not, and it cannot come to good." It will, should it happen to last, gradually induce a godless turn of thought, akin to the "rationalism" which has worked such mischief in modern Germany; for although teetotalism does not ostensibly disparage religion, it virtually sets its aside, by introducing and familiarizing to the public mind, certain motives and rules of action, other than Christian.

It surely behoves the great and the influential of our profession to "ponder well," before they lend their names to bolster up any novelty of such spurious origin, and fraught with such equivocal, or rather unequivocal consequences. The blessed Founder of our religion, has nowhere forbidden the use of wine. Quite the contrary: witness his first miracle. He has only forbidden the excess, not the legitimate indulgence.

I must now conclude, sincerely begging pardon for occupying so much of your valuable space. I have claimed for myself freedom of opinion and freedom of speech. But "*hanc veniam petimus damusque;*" I cheerfully concede to others what I have thus claimed for myself. I am conscious of no wish to hurt any man's feelings, or to offend even his innocent prejudices. Here then, the matter shall rest, so far as I am concerned. I am pre-determined not to be drawn into controversy.

I am, Sir,
Your faithful servant,
A. ROBERTSON, M.D.

Northampton, May 25, 1847.

General Retrospect.

PATHOLOGY.

RIGIDITY OF THE ARCH OF THE AORTA.

Dr. Bellingham has called attention to a condition of the arch of the aorta, which he states is often mistaken for regurgitant disease of the aortic valve, viz., rigidity and inelasticity with more or less weakness of the parietes of the vessels, with or without dilatation. His views of the production of dilatation of the aorta, are, that it is due to regurgitation of the blood from the carotid arteries into the inelastic vessel, and not as is commonly supposed, to the distensive force of the left ventricle acting upon the diseased arterial coats. The paper, which is one of much interest, terminates in the following *resumè*:—

1stly. That under certain circumstances the blood regurgitates into the arch of the aorta from the carotid and subclavian arteries during the diastole of the ventricles.

2ndly. That regurgitation into the arch of the aorta occurs whenever the coats of this vessel have become rigid and inelastic from previous disease.

3rdly. That regurgitation into the arch of the aorta from the carotid and subclavian arteries is capable of developing a sound, which has a great resemblance to the *second sound of the heart*, and is audible at the same period of the heart's action.

4thly. That a rigid and inelastic condition of the coats of the arch of the aorta, combined with roughness

of the interior of the vessel, and slight increase of its calibre, is characterized by certain well-marked physical signs, which will enable it in the majority of cases to be readily diagnosed.

5thly. That the physical signs of this morbid condition of the arch of the aorta resemble those of valvular disease, and have probably often been mistaken for it.

6thly. That the form of valvular disease with which it is most liable to be confounded, is a state of the semilunar valves of the aorta permitting regurgitation, which it resembles in a murmur accompanying the second sound of the heart, in the jarring pulse, and in the visible pulsation in the arteries; symptoms which heretofore were supposed to be pathognomonic of regurgitations through the aortic orifice.

7thly. That the morbid deposits which occur in the arch of the aorta are not the result of inflammatory action either of an acute or chronic character; neither can they be considered as the result of the natural degeneration which the tissues undergo in advanced life; but that they ought to be ranked among adventitious deposits.

8thly. That dilatation of the arch of the aorta is more frequently the result of regurgitation into this vessel from the large branches which come off from it than of the increased force with which the blood is propelled by the left ventricle, or than of any impediment to its passage through the remote or terminal branches of the aorta.

9thly. That our knowledge of the fact that regurgitation into the arch of the aorta occurs in cases where this vessel has become inelastic from disease, enables us to explain the cause of the *second sound* heard *in cases of aneurism of the arch of the aorta*, and to account for the second impulse felt where the aneurism forms a tumour externally.—*Dublin Medical Press*, April, 1847.

SURGERY.

ON THE EMPLOYMENT OF ISSUES.

By Dr. Brownless.

After a severe but just criticism upon the ordinary method of employing issues, the author gives the following account of his own notions upon the subject. He observes:—

I would recommend, instead of using the remedy in the manner which I have condemned, in the foregoing paragraphs, a method which, as I shall presently attempt to explain, seems to have reason on its side, and of the great value of which I have fully satisfied myself by experience.

Issues should be made of moderate size, and before the effects of the one first made are lost, by the process of repair of the ulcer being completed, another should be made at a distance from the former, so as to act upon another part of the joint affected; (for here I may be allowed to mention that this is frequently required in joints of considerable size, an issue on one side of a joint often relieving the side to which it is applied, but seeming to have little effect on the part of the joint remote from it.) Before the ulcer made by the last formed issue is nearly healed, a fresh portion of the skin should be destroyed by the caustic, and again and again should this process be repeated varying its position around the joint; and thus should a regular diversion from the diseased part be kept up.

There may be reasons in some cases for not carrying out this plan to the letter, as regards the destruction of fresh portions of skin on each application of the caustic. In such cases, or where the patient has great objections to it, a new plot of skin need not be destroyed on each occasion that the caustic is used, but Sir B. Brodie's plan of frequently rubbing the old sore with caustic may be adopted; but, as a general rule, I do not consider it so efficacious as the destruction of a fresh portion of skin, nor is the benefit so lasting, and consequently, the caustic requires to be applied much oftener than where fresh skin is destroyed. Undoubtedly the latter is attended with more pain; but its duration is short, and it is not followed generally by the irritative consequences of blisters, and some other counter-irritants, or, I may add, of issues, kept open by peas and pressure. Scars may be regarded as one inconvenience arising from this plan; but if we can obtain greater benefit to diseased joints by the application of the caustic to fresh portions of the skin, the scars appear to me of trivial importance, even in the case of the fair sex; for the joints, commonly the seat of the disease, are, for the most part, clothed, or at any rate may be kept so without any great drawback to the personal charms of any young lady.

The introduction of peas or other bodies for the purpose of keeping issues open, I would in no case recommend. If from any cause it be judged fit to keep open the same issue, let it be touched with caustic, but not kept open, even in this way, for any great length of time, or it will become comparatively useless.

During the treatment of a very considerable number of cases in which I had the opportunity of employing issues in this way, I found it to be the most efficacious mode of using them; and the principle, although not carried so far, has been fully confirmed in my mind, in a very extensive field for observation, by watching attentively for several years, the patients under the care of Mr. Vincent, in St. Bartholomew's Hospital.—*Lancet*, April 24th.

EXOSTOSIS AND ITS TREATMENT.

M. Roux terminates a long memoir on this subject with the subjoined conclusions:—

1. Among the various tumours of bones, there are certain to which alone the term exostosis is applicable, and which should be carefully distinguished from all others.

2. These, like the bones themselves, are composed of spongy tissue, enclosed in a more compact shell, or in other cases of the compact tissue only, in which case they resemble ivory.

3. Every exostosis of this kind is joined to the bone, from which it springs by a short narrow pedicle.

4. These tumours never surpass a certain degree of development.

5. Their volume is in general proportinate to the size of the bone from which they spring, being small on small bones, large on those of greater dimensions.

6. In general also they are not connected intimately to the soft parts by which they are surrounded.

7. They do not undergo degeneration, but preserve their primitive structure for an indefinite time; the only change which they experience is that of density.

8. These tumours produce a variable degree of inconvenience, according to their locality.

9. They might always be removed, if in some they were not inaccessible from situation.

10. They may be removed without being previously exposed, and though in some cases the operation is followed by severe consequences, it is in general successful.—*Revue Medico-Chirurg.*, Mars, 1847.

SIGNS OF FRACTURE OF THE CERVIX FEMORIS.

In allusion to a case recently occurring in the person of a woman, aged 53, M. Velpeau made the following remarks:—"Pain and swelling are signs of little consequence, as they may equally exist in fracture or sprain. The impossibility of *raising the heel from the bed* is a sign. It may certainly be present also in a painful affection of the joint; but in the fracture of the cervix there is an absolute impossibility of raising the limb, while in this other affection this may be done if the pain be disregarded. Thus, in a luxation, the patient seems at first unable to raise the limb, but he can do so by perseverance. *Eversion of the foot* is not a pathognomic sign, as it may exist in other lesions,—*e.g*, luxation on to the pubis; but in the case of luxation, not only is the limb everted, but neither the patient nor the surgeon can change its direction, while in fracture the surgeon easily turns the foot inwards. There are other affections in which the foot is rotated outwards, as in paralysis, and certain painful affections of the hip. The *admeasurement* of the limb is of great importance, but it is of much more difficult accomplishment than is generally believed. The inclination of the axis of the pelvis, or of the limbs themselves, often gives rise to apparent differences, against which we must be on our guard. We must never depend on mere inspection, but must carefully measure the limb after having placed the patient on his back, and take care that he lean neither to one side nor to the other. In these persons, and in those in whom the bony points is prominent, it is easy enough to measure from the iliac spine to the upper edge of the patella; but there are persons in whom the iliac spine is so rounded off, that we cannot be certain that we are applying the tape upon exactly corresponding points upon the two sides, and an apparent difference, amounting to some lines, may result. So also the patella is not only a fixed point, but its superior angle may be somewhat higher on one side than on the other. In this way several slight errors conjoined may give rise to the belief in a shortening, which has no real existence. By carefully guarding against any obliquity of the pelvis, ascertaining exactly the position of the superior anterior spinous process, and carrying the tape down to the malleolus, instead of the patella, we shall avoid all serious errors.—*Medico-Chirurgical Review*, Jan., 1847; from the *Gazette des Hôpitaux*, No. 68.

NEW OPERATION FOR INTERNAL PILES,

This method consists in the circular cauterization of the pedicles of the tumours with the solidified caustic of Vienna. The dangers which attend excision, and the hæmorrhage so frequently observed as a consequence of that operation, have induced many practitioners to prefer the actual cautery; but this method is one of difficult application, and the results which it yields scarcely compensates for the suffering which it causes. The new operation, according to the inventor, M. Amussat, is more fortunate in its results, exposes the patient to no danger, and to less pain than the other methods.

M. Amussat does not think it necessary, after destruction of internal piles, to remove also those tumours situated below the sphincter; he is of opinion that they materially subside after the cure of the internal hæmorrhoids. The intestine having been cleared by a dose of castor oil, exhibited one day before the operation, the hæmorrhoidal tumour is seized with a forceps, and, in order to protect perfectly the surrounding parts, they are isolated by the application of wooden or ivory blades, analogous to those of paper-knives. Another forceps containing the caustic on the inside of its branches, is then passed round the neck of the swelling, and cold water is injected over the tumour with a syphon throughout the operation, viz., two minutes. The hæmorrhoid is then emptied of its blood by a puncture with a tenaculum, a cold injection is made, and the parts are reduced. Three cases of success are reported; no accidents followed the use of the caustic.—*Medical Times.*

TREATMENT OF STRICTURE OF THE URETHRA BY HYDRAULIC DILATATION.

Mr. Goodman, of Manchester, in a late number of the *Medical Gazette*, relates the following case:—A man applied to him for relief, having a stricture in front of the bulb, of old standing. Four months before a small-sized bougie could with difficulty be passed, and on the time of application to the narrator of the case, total retention had ensued, after drinking freely of beer. An attempt was made to reach the bladder by appropriate bougies, but ineffectually, and it was therefore determined to have recourse to the forcible application of warm-water injections to the strictured part. After introducing a gum catheter as far as the stricture, where it was well secured by a band of tape, and compress placed upon the penis to prevent escape, a syringe-full of warm water was injected with some force, and was found to pass with tolerable ease. On removing the apparatus the man micturated immediately in a stream about the size of a crow-quill. A second application caused a still farther increase in the stream of urine, and the patient left for the time perfectly relieved.

MERCURIAL ACTION NOT A PREVENTIVE OF SECONDARY SYMPTOMS.

Mr. Holmes Coote has written a short paper for the purpose of showing that the full and distinct action of mercury, though it cures the primary symptoms of syphilis, is not the sure preventative of secondary contamination which it is commonly thought to be. To prove this he has recorded fifty consecutive cases of patients suffering from severe secondary and tertiary symptoms, of which seventeen are related in the

present communication, from the analysis of which he determines that mercury is unable to eradicate the venereal poison.—*Lancet*, April 24th.

DIAGNOSIS OF A MERCURIAL SORE.

In a valuable course of lectures on syphilis, Dr. Porter gives the following as the characteristics of the mercurial in contradistinction to the venereal sore:—

1. Mercurial sores are not necessarily circular or oval in shape, neither are their edges regularly defined; on the contrary, they vary in these particulars, and assume different forms as they spread: their edges are often quite ragged, loose, and undermined, and their borders are often marked with a thin transparent cuticle, like that of a newly-formed cicatrix, extending quite around them, and giving them a silvery-white appearance.

2. The bases of mercurial sores are not hard, neither are their surfaces covered with the tenaciously adherent lymph so characteristic of venereal; on the contrary, the surface of the mercurial ulcer may present every variety of shape and appearance, sloughy at one spot, deeply excavated and rapidly ulcerating at another, with exuberant granulations at a third, and exhibiting a tendency to heal at a fourth.

3. But the most striking characteristic of the mercurial ulcer is, its tendency to spread, and the manner in which it enlarges itself. Venereal sores when not affected by phagedena increase slowly, and having reached a given size remain so: the mercurial generally spread quickly, and there seems to be no limit to the size they may possibly attain. I have seen an ulcer as large as my hand in each groin of the same individual. Mercurial sores, too, are easily distinguished from the venereal when they assume an herpetic character, and heal in one part whilst they are spreading in another, which the latter never do: this latter diagnostic is often extremely valuable in ulcers of the throat and on the penis, where any extensive loss of parts may be most sensibly felt during the life of the patient. The mercurial ulceration, too, often attacks the cicatrix of a recently healed chancre, and a fresh sore is thus formed—a circumstance that does not happen to the true venereal sore, except by some accidental injury, or the application of a new infection.—*Dublin Medical Press.*

TREATMENT OF CONSTITUTIONAL SYPHILIS IN THE INFANT.

M. Trousseau has for several years followed the subjoined plan of treatment in these cases with success:—

He administers daily to both mother and child a sublimate bath; (Hydrarg. Bichloridi, dr. iij.—dr. vi.; Alcohol, oz. iij., to a common bath.) If the infant is nursed by the mother the latter is made to take the proto-iodide of iron; if the child is weaned it takes ten drops of the following solution three times a day:—R. Hydrarg. Bichlor., gr. iv.; Aquæ, Oij. The dose amounts to about a 60th part of a grain.—*Gazette Méd.*, Févr. 6, 1847.

FORENSIC MEDICINE.

QUESTION OF IDENTITY: ARE CICATRICES INDELIBLE?

Medical Jurists have foreseen the case in which the condition of a cicatrix may be regarded as a means of proving identity, and they have, moreover, mentioned the circumstances which may so alter their appearance as to prevent them from being recognized. But instances of the actual necessity of referring to these marks in a medico-legal inquiry are comparatively few. The following case is one of the kind:—An Englisman, who was sentenced in 1828, to ten years' imprisonment and labour for forgery, obtained his dismissal after a brief period, on the condition that he should quit the country for ever. While in prison it so happened that he was inspected by the surgeon, M. Vandalaer, who remarked an indelible cicatrix of a burn. Having settled in France he was again pursued for forgery, and the police finding that he had returned to Brussels under an assumed name, demanded him to be given up. He was immediately arrested, but denied that he was the individual in question, in consequence of which he was transferred to Brabant to be identified.

At the trial the prisoner still persisted in his denial. Some of the officials of the prison thought they recognized him, and others could swear to his identity, but no positive proof was forthcoming. The circumstance of the cicatrix was then recollected, and surgeons were called to examine the part. M. Vandalaer, in the first instance, was asked whether he recognized the mark, and replied that he did not, but that he did not consider its absence a proof of non-identity, as time and artificial means might have contributed to its removal. The same opinion being held by other medical men, the prisoner was convicted. It appears from the evidence of one of the surgeons, that the prisoners who are branded are in the habit of removing the cicatrix by placing over it a salted herring.(?)—*Gazette Médicale*, Avril 3, 1847.

Medical Intelligence.

THE MEDICAL REGISTRATION BILL.

HOUSE OF COMMONS, Tuesday, May 14, 1847.

Mr. Wakley moved that the subjects of the registration of legally-qualified practitioners in medicine, and the state of the laws relating to the practice of medicine in Great Britain and Ireland, be referred for consideration to a select committee, who should report the evidence, with their opinions thereon, to the House.

After some remarks by Mr. Wakley on the advantages to be expected from a committee of inquiry—

Sir G. Grey observed, that although he did not think the objections which had been urged against many parts of the Bill of the hon. member for Finsbury ought to prevail, he was convinced that if that measure had been pressed now, any chance of satisfactory legislation on the subject during the present session would have been hopeless. He considered that the hon. gentleman was taking the more judicious course in asking for the appointment of a committee, before whom the various conflicting opinions which existed on this question might be expressed; and he (Sir G. Grey,) believed that such an inquiry would tend to lead to satisfactory results. He was willing to accede to the motion, on the understanding that the hon.

member for Finsbury would not proceed with his Bill until after the committee had made a report.

MAY 22nd,

Committee nominated: Mr. Wakley, Mr. Macaulay, Sir James Graham, Mr. G. Hamilton, Mr. Bannerman, Mr. Acland, Mr. Hawes, Mr. Fitzstephen French, Sir Robert Harry Inglis, Mr. Dennistoun, Viscount Sandon, Mr. Boyd, Mr. Aldam, and Mr. Lascelles.

Power to send for persons, papers, and records. Five to be the quorum.

LEEDS HOUSE OF RECOVERY AND FEVER HOSPITAL.

We have just received the Annual Report of this Institution, for the year ending September 30th, 1846, from which it appears that the number of patients, chiefly fever-cases, admitted during the period, and especially in the last two months, was considerably greater than the usual average.

The average admissions of the preceding ten years amounted to 329.7. The admissions of the year 1844-5, were 329. The admission from October 1st, 1845, to October 1st, 1846, were 433, being 104, or nearly one third more than the admissions of the preceding year, and the general average, which, with 20 cases remaining on the books, give 453 as the number of cases under treatment. The number of deaths was 59, of which, eleven took place within twenty-four hours, and twenty-two others, thirty-three in all, within one week. The mortality was 13.606 per cent. nearly, or not quite, one in seven. The greatest number of admissions was in the month of August, amounting to 69; the smallest number in December and January, 24 in each. The admissions during the six winter months averaged about 30 each month; during the six summer months, rather more than 42; but the increase in the number of patients was wholly in the months of August and September, when the admissions amounted to 128, the monthly average of the preceding ten months being 30.5, or nearly that of the winter season.

The following table shews the ages of the patients and the mortality at each decennial period:—

	Admitted.	Died.
Under 10 years . . .	37 . .	6
10 to 20	173 . .	17
20 to 30	108 . .	11
30 to 40	58 . .	11
40 to 50	33 . .	6
50 to 60	12 . .	1
60 to 70 and upwards	11 . .	6

The chief mortality of the Institution, as well as the chief prevalence of disease, was therefore between the ages of 10 and 30.

QUEEN'S COLLEGE HOSPITAL, BIRMINGHAM.

The efficacy of the inhalation of æther, and the safety of its exhibition in operations on the young subject, was tested on Saturday last, at the Queen's Hospital, in three cases. In the first case, a little boy, from Halesowen, between three and four years of age, labouring under stone in the bladder, was by means of Mr. Atlee's inhaler, put under its influence. The operation with the knife was performed by Professor Sands Cox, and a large stone extracted under the minute, without the poor little sufferer evincing sensibility to pain. In the second case, a little girl, aged nine, a native of the town, suffering under scrofulous disease of the knee-joint, amputation (under the same influence,) above the knee, was rapidly performed by Professor Knowles; not a sigh, murmur, nor the slightest expression of pain escaped her lips. In the third case, a boy, from Bilston, aged 14, with diseased ankle-joint, amputation was performed below the knee; narcotism, in this case, could not be induced, although inhalation was persevered in for more than a quarter of an hour, and the case formed a striking contrast to the preceding.

MEDICAL APPOINTMENT.

It is stated that M. Berard, sen., is to succeed M. Lisfranc, as Surgeon-in-Chief of the Hôpital la Pitiè, Paris.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, May 21st, 1847:—R. P. Bayley; W. H. Brace; H. Tireman; R. Bentley; J. F. O'Leary; H. W. Slack; A. Somers; G. A. Wilkinson; W. B. Deacon; J. Ward; R. N. Bower.

Gentlemen admitted Members on Friday, May 28th, 1847:—D. Badcock; J. R. Lane; C. R. Durell; J. T. Clover; T. S. Collier; T. Rhys; L. Clarke; W. Pritchard; J. A. Simons; R. Davies; J. C. Inglis; B. Daniel.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, May 13th:—William Thomas Gaye, Minehead; Joseph Delves, Tunbridge Wells; James Lewis Holloway, Charlbury; Richard Dechamp Ball, Plymouth; Joseph Williams, Williton, Somerset; William Watts, junior, Nottingham; Benjamin Daniel, Kingston-upon-Hull; Thomas Robinson, Wellingborough; and Thomas Bridgwater, Glasbury, Breconshire.

Gentlemen admitted Licentiates, Thursday, May 20th, 1847:—Charles King, Southampton; George Milburn, North Shields; William David Wilkes, Salisbury; John Smith, Bishops Lydiard, Taunton; Samuel James Augustus Salter, Poole; Richard Jones, Brackley; Ellis Southern Guest, Manchester; Charles Frederic Augustus Courtney, Ramsgate; William Honner Fitzpatrick, Liverpool.

OBITUARY.

Died, May 11th, aged 58, at Paris, from malignant remittent fever, M. Lisfranc, Surgeon-in-Chief of the Hôpital la Pitié. M. Lisfranc was a member of the Royal Academy of Medicine, and a Knight of the Legion of Honour.

May 11th, at Bath, aged 35, Joseph Channing Pearce, Esq., M.R.C.S., F.G.S., &c.

May 11th, at Fulham, aged 47, Joseph Holmes, Esq., Surgeon.

May 15th, at Bedford, William R. Mesham, M.D., Physician to the Bedford General Infirmary. Dr. Mesham was found dead in the Committee-Room of the Infirmary, having evidently swallowed prussic acid.

May 16th, at Mohill, of typhus fever, Henry Soden, M.D., Medical Attendant of the Union Workhouse.

May 17th, in Regent Street, John Phillips Potter, Esq., Assistant Surgeon to University College Hospital, and Assistant Demonstrator at University College. Mr. Potter died from the effects of a puncture received during a *post-mortem* examination.

May 25th, at Worcester, Thomas Taylor, Esq., Surgeon, of Kidderminster, a Member of the Provincial Medical and Surgical Association.

Lately, at Berlin, aged 55, Professor Wagner, of that University.

METEOROLOGICAL JOURNAL FOR MARCH, 1847.

Observed at Uckfield, Sussex, by C. L. PRINCE, Surgeon.

			DEGREES.
Maximum Temperature in the Shade,	26th	.	67.
Minimum ditto . . .	ditto 11th	.	20.
Mean ditto . . .	ditto . . .		42.37
Range of ditto . . .	ditto . . .		47.
Mean daily Range	ditto . . .		18.29
Mean Maximum	ditto . . .		51.83
Mean Minimum	ditto . . .		32.91
Maximum in the Sun	27th	.	75.
Minimum on the Grass	11th	.	15.
Extreme Range		.	60.
Mean Maximum in the Sun			58.16
Mean Minimum on the Grass			28.93
Mean Dew-point, 9 a.m.			34.84
			INCHES.
Mean Pressure			29.967
Maximum ditto	3rd	.	30.43
Minimum ditto	31st	.	29.47
Range			.96
Depth of Rain			.67
Evaporation			2.31

Prevailing Wind, North-East.

BOOK RECEIVED.

An Account of the late Epidemic Scarlatina, in Newcastle and its Neighbourhood. By Edward Charlton, M.D., Edin., Physician to the Gateshead Dispensary, Lecturer on the Practice of Physic in the Newcastle-on-Tyne Medical School, &c., &c. Newcastle-upon-Tyne: Richardson. 1847. 8vo. pp. 62.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ANNIVERSARY MEETING.

The Anniversary Meeting of the Provincial Medical and Surgical Association is appointed to take place at Derby, on Wednesday, August 4th, and Thursday, August 5th.

ROBERT J. N. STREETEN,
Secretary.

YORKSHIRE BRANCH MEETING.

The Annual Meeting of the Yorkshire Branch of the Association will be held at the Cutlers' Hall, Sheffield, on Thursday, June 10th, at twelve o'clock. Members of the Association, or of the profession, who are not members of the Branch, may be admitted as visitors on the introduction of a member.

Any communication connected with the meeting should be made to the Secretary, Mr. Husband, York.

COUNCIL PRIZE.

The Committee appointed at Norwich for the management of the Council Fund for the present year beg to announce that THE COUNCIL PRIZE of £50 will be given for the best Report "On the Cerebral Affections of Infancy."

The prize is open to general competition; the papers to be sent in to the Secretary of the Committee, Dr. Streeten, Worcester, on or before the 31st of May, 1848, each paper to have a motto affixed, and to be accompanied by a sealed envelope, bearing the same motto, and inclosing the name of the author.

NOTICE TO MEMBERS.

Gentlemen who have not yet paid their subscriptions for the current year, or who are in arrears, are requested to forward the amount due, either to the Secretary of the District in which they reside, or to the Treasurer or Secretary of the Association.

ROBERT J. N. STREETEN, Secretary.

TO CORRESPONDENTS.

Communications have been received from Mr. J. F. Clark; Dr. Addison; Mr. Image; Mr. T. Salter; Mr Mayo; Mr. Trousdale; Dr. Turnbull.

Dr. Basham's Lectures will be resumed in the next number of the Journal.

It is requested that all letters and communications be sent to Dr. Streeten, Foregate Street, Worcester. Parcels and books for review, may be addressed to the Editor of the Provincial Medical and Surgical Journal, care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON CLINICAL MEDICINE.

By W. R. Basham, M.D., Physician to the Westminster Hospital.

Lecture X.

Case of Hypertrophy of the Heart with Dilatation: the accompanying symptoms illustrative of this form of cardiac disease; cough; dyspnœa; peculiar and special form of expectoration; anasarca and general dropsy: stethoscopic signs.—Hepatic derangement; state of the excretions; condition of the urine albuminous; deficient in urea; analysis of the blood, detection of urea in.—General indications of treatment; advantages of venesection.—Singular character of matter vomited from the stomach; the Sarcina ventriculi, *of Goodsir, observed in the yeasty mass ejected from the stomach.*

Gentlemen,—The case to which I wish to engage your attention to-day, is one that I have had frequent opportunities of making passing observations upon during our visits to the wards; but as it has presented many symptoms of complication and difficulty to the student in clinical medicine, I propose to take a general review of the symptoms as recorded in the ward-book, and to give you such explanations as may be necessary to interpret either its pathology or treatment.

G. F——, aged 38, carpenter, has been addicted to drinking; his general health has been good till within the last five weeks. He was admitted into Burdett ward on December 24th, and was then suffering from frequent urgent dyspnœa, with suffocative cough, and copious expectoration, of a very dirty-coloured, glutinous, jelly-like fluid. He states that his health began to give way about five weeks since, first complaining of severe attacks of gastrodynia and tenderness at epigastrium, augmented after eating; cough and dyspnœa followed, and then the legs began to swell, and he noticed that the face became puffed and œdematous in the morning. There was, on admission, general anasarca, the scrotum being distended with fluid; face œdematous, especially in the morning; aspect of the patient not unhealthy, as there is a remarkable injection of the vessels of the cheeks, which gives a florid appearance of health; the conjunctiva has a slight icteritic hue; the surface of the chest is œdematous, the stethoscope leaving an impression by its pressure. The chest is equally resonant throughout; no dulness in the præcordial region; vesicular murmur not clearly heard; bronchial respiration in each region, with deep mucous gurgling of large bubbles; impulse of the heart much increased, the head being sensibly raised by the upheaved stethoscope; the systolic murmur is not prolonged, but the diastolic sound is confounded somewhat with it, it is not clear and distinct; the pulse is sharp and full, regular and equal on both sides; no pulsation noticed in the neck; the cough is frequent; sputa muco-glutinous, and stained by the hæmaphæin of the blood; some slight tenderness on pressure in the lumbar region of the kidneys; the liver appears to occupy a larger space than usual, but there is no tenderness in the right hypochondriac region. He was cupped over the region of the heart, and directed to take the blue pill, in three-grain doses, night and morning, with infusion of diosma and tincture of digitalis.

During the next twenty-four hours the anasarca sensibly diminished, but the heart's action continuing very violent and impetuous, it was thought desirable to take blood from the arm to sixteen ounces. The blood drawn did not separate into its constituent portions of coagulum and serum, but remained a firm uniform coherent red clot, easily broken up, but which did not yield up any serous fluid on being so disturbed. The urine was this day examined. He passed not more than a pint in the twenty-four hours; it was cloudy, of an orange-brown colour, with numerous flocculi appearing in it, faintly acid, cleared by heat, with copious evolution of gas-bubbles; on reaching the boiling point it again became cloudy, and on the addition of nitric acid, a flaky albuminous deposit in minute quantity, was thrown down. Microscopically examined, amorphous urate of ammonia, with considerable amount of epethelial matter, was observed. As he obtained no sleep, being much disturbed by the cough, he was ordered Extr. Conii, gr. x., hora somni.

The impulse from the heart continuing but little diminished, and the pulse being still full and sharp, it was thought desirable on the 31st to take a farther quantity of blood from the arm, and eight ounces were abstracted; and now the separation into serum and clot took place, but there was no separation of the red particles from the fibrin. The effect of this bleeding was most beneficial upon the secreting organs; the kidneys now formed two pints and half of urine in the twenty-four hours, of a lighter colour and clearer, with less deposit of urates. The fæces became of a brighter bilious hue, and the expectoration was more copious and easier of excretion, but still presented a dirty hue, the colouring matter of the blood being still

dissolved in it. The anasarcous condition of the system had much diminished; there was much less œdema of the chest; no swelling of the scrotum; and scarcely any of the lower extremities. On the 2nd of January, the quantity of urine excreted is stated as three pints; natural in colour and general appearance; no indication of albumen; normal amount of uric acid; tongue clean; pulse, however, still continued full, sharp, cordy, and jerking. Up to this period the patient had been confined to a fish diet, carefully avoiding all stimuli. The mercurials were repeated only at intervals; digitalis being solely trusted to bring down the impetuosity of the heart's action after the *plenitudo ad molem* had been to a certain extent relieved by venesection.

The report of the 4th of January states that the urine had again diminished to a pint and a half, of a brown orange colour, and much loaded with urates. The heart's impulse still continues augmented; sounds somewhat obscure; an aortic bruit accompanies the systolic murmur, increased and becoming more distinct as the stethoscope is raised to the position of the arch of the aorta. On the 6th of January the urine became again highly loaded with urates; albumen in small quantity still present; bowels continue to act freely, but the dejections are offensive and dark coloured; pulse 120, full and incompressible; cough frequent and distressing; sputa as before, but without any trace of blood; heart's impulse much increased; action impetuous. Blood was again taken from the arm to eight ounces, a portion of which was analysed by the following process, to ascertain if urea existed in the blood. As soon as drawn, three ounces were agitated well with pure alcohol, and allowed to stand at rest for four hours; the mass was then filtered, and the residue on the filter again treated with alcohol, and the solution filtered. An orange-coloured alcoholic solution was obtained, which was evaporated to dryness in the water bath, after three fourths of the alcohol had been recovered by distillation at a low temperature. The dry residue had a yellow orange colour, and a faint crystalline appearance; a few drops of distilled water were added, and then a small quantity of pure nitric acid; on setting this aside in a watch-glass in a cool place, after an hour's rest, crystals of the nitrate of urea were distinguished with the half-inch glass, under the microscope.

It was now thought advisable to allow the system to rest for a time without any interference by medicinal agents, for the last abstraction of blood had materially relieved the more urgent symptoms; the heart's impulse was diminished; the pulse was reduced to 90, softer in character; and the cough was less frequent, and the expectoration free from hæmaphæin and more purely mucous in its appearance. The urine, though still high in specific gravity, (1.021,) was clear, yet dark coloured. No urea could be detected, and the presence of albumen was still indicated by the ordinary re-agents.

On the 9th of January a great improvement became manifest. The anasarcous condition of the surface had disappeared, and the legs only became œdematous towards night, and after he had walked much about the ward; the pulse, however, had become unnaturally frequent, 120, but had lost its jerking character, and the general appearance of the patient was that of a healthy man, from the before-noticed state of the capillaries of the cheeks. The sputa had become much diminished in quantity, and frothy, and colourless, presenting only a few masses of yellow mucus. He was now placed upon an improved diet, three ounces of meat for dinner, with extra bread allowance. Two days after, however, the symptoms again retrograded. The œdematous condition of the legs, scrotum, and entire surface, even of the cheeks, again returned. The urine two pints daily, of a dark orange-colour, with copious deposit; bowels open, dejections natural; appetite craving; pulse 110, full and tumultuous.

The symptoms continued without any material alteration to the 21st of January. During this interval he had taken nitric acid, and subsequently for a few days, quinine, but without any change for the better. On the 21st, after breakfast, he was seized with nausea and vomiting of a peculiar yeasty-looking fluid. The urine during the last few days had become very dark coloured, of a specific gravity of 1.022, and the amount of albumen had very much increased. At the afternoon visit on this day, a rough murmur was heard continuous with the systolic sound, and much obscured by the moist mucous crepitation, heard more particularly in the mammary region of each side. A good deal of restlessness occurred, and morphia was administered at night.

On the 22nd, vomiting again occurred, of the same frothy yeasty fluid. This, when examined by the microscope, presented many fat globules, epithelial scales in abundance, frequent tufts of margaric acid, and several beautiful specimens of the *Sarcina ventriculi* of Goodsir. Ammoniated draughts, in a state of effervescence, with citric acid, were given; and arrow-root, and small quantities of wine, with morphia at night. The ammoniated draught seemed to check the vomiting, for it did not return after the first two doses. During the next three days the œdematous state increased; the heart's action increased in tumultuous impetuosity; the sounds in the præcordial region became muffled; the cough and dyspnœa returned in frequency and urgency; the urine diminished in quantity; the bowels were freely moved; the appetite craving; no thirst, no vomiting. The dyspnœa became more urgent on the afternoon of the 26th of January, and in the evening of that day he died.

Sectio Cadaveris twenty-four hours after death.—The whole surface of the body was anasarcous, the subcutaneous tissues being much infiltrated with clear serum; some also was present in the abdominal cavity. Firm adhesions between the pleural surfaces. The bronchial glands situated at the fork of the division of the bronchi were very much enlarged, as were also those which lay beneath, and followed the direction of the left bronchus. The mucous membrane of the trachea was finely injected, and of a bright red colour, but at the bifurcation this colour had become of a dusky brown, with marked evidence of passive venous hyperæmia; all the tubes were filled with a tenacious fawn-coloured mucus. The heart was very much enlarged, its cavities dilated, and its walls thickened;

it weighed after being cleaned seventeen and a half ounces; the tricuspid valve was opaque and thickened at its edges; the semilunar valves of the pulmonary artery were natural; the aortic valves, however, were rigid, and stood out pouch-like from the parietes of the vessel, and their edges thickened and covered with wart-like fibrinous growths. The aorta for five inches in its extent, was covered with a semi-cartilaginous deposit that presented the walls as wrinkled or corrugated, and with evident enlargement of its capacity by dilatation. The liver on the superior surface of the right lobe presented a copious exudation of plastic lymph, causing firm adhesion to the diaphragm; the substance of the organ was highly granular, and exhibited the features of incipient cirrhosis, the appearance being myristicate,—a purplish veining, surrounding isolated yellow granules. The organ weighed fifty-nine ounces. The kidneys were not enlarged; the right weighed four ounces and three quarters, the left five ounces. The tubuli uriniferi were clearly marked out by a deep purple injection, and the cortical part was granular, plainly demonstrated when the peritoneal tunic was removed; some granular deposit was also observed dipping between the tubular processes. The veins of the stomach both of the lesser and greater curvature, were so gorged with blood as to present a remarkable feature. The mucous surface of the viscus was of a purple madder colour throughout, and the greater part of the mucous membrane of the small intestines presented the same appearance. The mesenteric veins were much distended. The bladder exhibited, as to its mucous membrane, similar conditions to that of the stomach.

The history of this case presents us with all the most characteristic features of hypertrophy and dilatation of the heart; it exhibits also many circumstances illustrating the effects of mal-assimilation, and the consequent diseased condition of the blood. The position these several morbid conditions bear towards each other, it is impossible, with certainty, to define. Whether the heart-disease be the cause, and the other morbid conditions but the effect of the disturbed circulation; or whether reversely, the organic alterations in the heart's structure, be produced by an imperfectly formed circulating fluid, deficient in formative elements, or redundant with morbid material, and capable of exciting the heart to irregular action, it is not possible to determine. It is my wish on all occasions of our meeting for clinical study, to avoid mere speculative or hypothetical points, and to confine myself strictly to an explanation of the symptoms that are capable of illustrating the nature and progress of diseased action. Laying aside therefore the speculative matters just hinted at, let me turn your attention, first, to the more prominent and most characteristic symptoms of hypertrophy, with dilatation; and secondly, to the more complicated condition of deranged secretion and diseased blood.

The earliest symptoms recorded in the case book are those of cough and dyspnœa, accompanied by a peculiar form of expectoration. In searching for the cause or origin of these *pulmonary* symptoms, we fail to detect any specific commencement from an inflammatory attack, or anything analogous to an attack of bronchitis. The patient declared that the cough came on gradually, and became aggravated day by day, in an imperceptible manner, and that up to a certain period, though occasionally troublesome, it did not stop him from his usual avocations. The dyspnœa became subsequently very urgent, and compelled him to seek medical relief. Cough and dyspnœa thus gradually coming on, without any previous well-defined inflammatory attack, may generally be considered as indicative of some deranged condition of the pulmonary circulation, originating in irregular cardiac action. The mucous membrane in these cases is in a state of venous hyperæmia, sometimes called passive congestion; it is livid in colour, turgid, and œdematous, and a dirty-coloured brownish viscid secretion lines the bronchial tubes, and is the main cause of the cough and respiratory distress. When raised and expectorated, the sputa are specially characteristic of the above-described condition of the mucous membrane, differing remarkably from any form of excretion that usually follows inflammatory states of the bronchial tubes. The expectorated matter is glutinous—similar to glue, both in consistence and colour, of a dirty dusky ochre, or fawn colour, sometimes even still darker, as if the hæmaphæin of the blood were dissolved in it. This form of expectoration may be considered very characteristic of venous hyperæmia of the bronchial mucous membrane, arising from heart-disease. The cough commencing imperfectly, the dyspnœa and this peculiar glue-like expectoration may be taken as one series of the symptoms indicative of hypertrophy with dilatation.

The second series embraces the anasarcous condition of the surface of the body, the œdematous condition of the face in the morning, or after sleep, and the general dropsical state of the system generally, the swollen legs, and distended scrotum. The third series of symptoms comprises the altered state of the secretions; the high coloured, orange-tinted, and albuminous urine, deficient in urea, abundant in uric acid and its compounds, diminished in quantity, and of high specific gravity; the dry, acid skin, the icteritic aspect, and the offensive mud-coloured, imperfectly formed fæces. This category of symptoms suggests the heart to be, in a corresponding degree, deranged in function, and probably altered in structure; and though we cannot prove that all these symptoms are severally dependent on the diseased heart as their morbid cause, yet experience teaches us that they for the most part co exist, and that the presence of the above-enumerated series would be presumptive evidence of disease of the heart. The stethoscope amply confirmed this suspicion of cardiac disease, and enabled us to define, to a certain extent, the special form of disease affecting this organ; the impulse of the heart was increased to such an extent as sensibly to raise the head when applied to the chest; the rhythm of the heart's sound was not perfect; the systolic and diastolic murmurs were confounded, the latter merging into the systole, and not to be distinguished clearly from it. There was an aortic bruit heard over the aortic region, continuous with the systolic sound; hypertrophy, with dilatatio

and some organic defect in the aortic valves, were thus detected; but the stethoscope not only indicated these alterations in the structural condition of the heart, upon the admission of the patient, but it enabled us to determine the progressive mischief and changes that were proceeding, unchecked by any of the remedies employed. Notwithstanding that at one time a favourable change appeared to take place, the worst symptoms being suspended, the anasarcous condition having disappeared, the cough and dyspnœa abated, and this consentaneous with a general improvement in the several secerning functions, yet, nevertheless, the stethoscope revealed, even at this period, a peculiar aortic bruit, and on the 21st of January this had increased to a rough murmur, heard most plainly over the aortic valves, and which irregular sound clearly indicated some defective formation of, or adventitious growth upon, the membranous fold. The *post-mortem* examination explained this aortic murmur, and shewed it to have been caused by the fibrinous vegetations found appended to these valves.

The cardiac disease must be accepted as the cause of the dropsy, combined, perhaps, with a morbid condition of the liver, by which the freedom of the portal circulation was checked. The heart endowed by its increased volume of muscular fibre, with an augmented power, forces the arterial current through the aorta and the arterial trunks, with a force disproportionate to the power of the venous capillaries to carry it onward in its return to the right side. The dilated condition of the auricles, especially the right, diminishes the suction power by which the venous blood is in some measure moved towards the heart; the venous current is thus retarded, and general venous hyperæmia produced. Hence the anasarcous state of the whole surface of the body, face, chest, arms, trunk, and lower extremities; and hence also the venous congestion of internal organs, kidneys, liver, mucous surface of lungs, stomach, and intestines, and the consequent alteration in the integrity of their several functions. The distressing state of the respiratory organs, the urgent dyspnœa, is in like manner caused by the heart-disease. The increased power of the right ventricle drives a volume of blood upon the lungs, with a force incommensurate with the oxygenating power of the ordinary respiratory process; venous congestion results. An œdematous state of the bronchial mucous membrane is among the morbid consequences; a mucous secretion, peculiar in its character, forms in the bronchial tubes, and a frequent harassing cough, vainly exhausts the patient in efforts to clear the air-passages from this impediment to the respiratory functions.

Such are the pathological conditions observed in this patient, and now let me detail to you the principles upon which the treatment of such a case should be conducted. Venous congestion, or retardation and obstruction to the venous current of blood, has been pointed out as the proximate cause of the most prominent symptoms; and to diminish the volume of blood moving to the right side of the heart, by venesection, should be our first effort. Blood taken from a vein in the arm, judiciously proportioned as to quantity, quickly induces relief to the more urgent and distressing symptoms, the permanency of which is proportioned in a great measure to the extent of the disease. Internal remedies are feeble in their effects, and uncertain in their operation, till the congested state of the venous system has been relieved by blood-letting. Mercury produces no appreciable effect on the secretions,—digitalis is useless as an internal agent, till the plethoric condition of the system has been diminished. So soon as that has been effected, then these remedies, either separately or combined, oftentimes operate with marked success. You cannot have failed to notice in this case the immediate and sensible relief obtained from the more distressing symptoms, as soon as blood was taken from the arm. The cupping over the region of the heart obtained the effect desired, as far as the threatened or suspected indications of pericarditis were concerned; but it was not till after the bleeding from the arm, that the most evident benefit to the general symptoms was observed, and then also the effects of the mercury and digitalis quickly developed themselves in augmented and improved secretions, and a gradual abatement of the general dropsy. This favourable condition, however, did not continue, as is but too often the case; for it is but temporary relief that can be expected, when this form of heart-disease has made any progress. The urine again diminished in quantity, became more highly albuminous than before; anasarca of the lower extremities returned, but the cough and dyspnœa were not so distressing as on his admission. He was again bled, and the blood was reserved for analysis, to ascertain if urea could be detected in the blood, that element being deficient in the urine, and my object was to gain some additional evidence of the possible existence in the kidneys of that granular degeneration known as the morbus Brightii. At the time this analysis was made, I explained to you the method of conducting it. It is a process requiring much analytic skill. The presence of urea in the blood was determined, and you had an opportunity of seeing the minute crystals of the nitrate of urea under the field of the microscope. I had now no hesitation in believing that a granular state of the kidneys had to be added to the other serious morbid conditions, and with this complication to pronounce a most unfavourable prognosis; and as the prospect of any ultimate relief was very remote, and as injudicious efforts to obtain benefit from questionable remedies, after the general therapeutical indications have been fully carried out, oftentimes only aggravate the symptoms and hasten the catastrophe, it was thought advisable to depend on a simple diet, rest, and the occasional administration of such remedies as the more prominent or urgent symptoms might require.

He gradually got worse, but before his decease there occurred an irritable state of the stomach, with frequent vomiting,—a state of things scarcely requiring notice but for the remarkable character of the vomited matter, and the interesting opportunity afforded me of observing in it specimens of the *Sarcina ventriculi*, of Goodsir. The interest of this circumstance is increased by the fact that the vomited matter in this case appears to

have presented the same peculiar characters as were observed in the case recorded by that eminent microscopist, in his first account of this species, in the *Edinburgh Medical and Surgical Journal*. The vomited matter in that case is described as having the appearance of yeast, and the report in Burdett ward-book of the vomiting of this patient was that it looked like yeast. It was not till the following day that I had an opportunity of seeing this singular yeasty, pulpy mass, which I witnessed being ejected from the stomach. Its appearance was so peculiar that I at once placed it under the microscope, and then I immediately recognized those singular cubic and *bale*-like masses of vegetable development, minutely and regularly marked into sections of quadrupled subdivisions. There were also many tufts of margaric acid, with epithelial cells in abundance. There is much interest in the coincidence of the presence of the *Sarcina ventriculi* in vomited matter of the same physical characters, and it certainly gives force to the opinion of Goodsir, that in special cases the contents of the stomach suffer certain spontaneous or intestine changes, analogous to fermentation, and consequently opposed to the true digestve function, which must for the time be in abeyance, and that as the consequence of this fermentative process, certain vegetable structures are developed, of which the *Sarcina ventriculi* is an example.

THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(*Fourth Series of Experimental Researches.*)

By William Addison, M.D., F.R.S., Malvern.

(*Continued from page* 263.)

XIV. Inflammation considered morphologically.

Vague generalizations with respect to the nature of the elements entering into the normal composition of the textures, and a neglect of the order of their appearance in the embryo, may be enumerated as obstacles to a knowledge of the real nature of inflammation and of the import of pathological facts. Among the *mucous* membranes or textures many microscopical distinctions exist; and the same may be said also of the *serous* membranes. The outer covering or *tunica conjunctiva* of the eye-ball, differs from the *intestinal villi*; the *pia-mater*, from the *plexus choroides*, and the synovial membrane of the joints.

In researches directed to the attainment of a knowledge of the morphology of the elements of normal textures, for the purposes of practical medicine, it is important to arrive at some conclusion with regard to the relative values of a microscopical and chemical analysis; and the following considerations have prompted me to trust to the former as the surer and safer guide.

First, the microscopical investigations of Schleiden, Schwann, Henle, Barry, Wharton Jones, Bennet, and others, have contributed to the development of a physiological law or order, by which abnormal changes may be rationally and scientifically tested; whereas chemical philosophers have done nothing in this respect. Secondly, microscopical analysis reveals elements and forms, as nearly as possible as they exist in the living structure,—nay, in the living body itself; whereas, a chemical analysis furnishes only the result of complex manipulations, in which unnatural agents are employed, unnatural changes produced, and unnatural products evolved. Thirdly, the materials for the growth and nutrition of living bodies are prepared or elaborated in the interior of closed vesicles or cells, so that when the cell-wall ruptures, and the interior matter is thereby exposed to new agents, new changes occur; and alterations of form and quality therefore anticipate a chemical investigation. Lastly, vegetable morphology, as a branch of scientific research, owes everything to the microscope, and nothing to the filtering paper, the test-tube, or the crucible; it is therefore reasonable to expect that the normal order of animal morphology may be equally as well illustrated by the same means. Not that microscopical and chemical investigations are to be considered as in any way opposed to each other; on the contrary, the question is, which, in the present state of our knowledge, affords the most useful and trustworthy information. Chemical facts in their relation to the structure and functions of living beings, appear to me, at present, as loose and isolated materials, which may hereafter find their useful applications; but to the microscope will, if I mistake not, belong the credit of enabling us to establish physiological and really practical principles.

In applying the law of morphology in explanation of the phenomena of inflammation, the distinctions between *organs*, *textures*, and *elements*, must be *insisted* on.

In vegetable structures,—leaves, sepals, petals, stamens, and carpels are organs.

It has been shown (I., p. 33) that leaves are composed of two distinct cellular textures, (the coherent respiratory, and the incoherent secretory,) of a supporting fibrous texture, spiral vessels, and stomata. The same kind of demonstration may be extended to all vegetables organs.

It has also been shown, (I. and II., pp. 33 and 61,) that the elements contained within the secretory cells are either a viscous protoplasma mixed with molecules, green granules of chlorophylle, with sundry properties and qualities; or (as in petals,) a coloured fluid with molecules. The differences in these elements being due to an elaborating process effected within the closed cells in obedience to a fixed morphological law.

The same kind of demonstration may be extended to animal structures. In the human body, for example, the liver, the lung, the brain, the kidney, and a bone, are organs; each organ being composed of various

textures, and each texture of special histological or morphological elements. Thus, the liver, which is a secreting organ, has the following textures and elements entering into its composition :—

1. *The hepatic parenchyma.*—A brittle, slightly-coherent, corpuscular texture, the elements of which are cells, containing in their interior a yellow fluid, with numerous molecules and globules of fatty matter, (together forming a kind of animal endochrome,) which, when set free by the dissolution of the cell-walls, constitutes the secretion termed the bile. The cells are congregated in small groups, termed lobules, each lobule having its own vessels and ducts.

2. *The areolar texture.*—A coherent elastic texture, interposed between the lobular sub-divisions of the hepatic parenchyma, and forming a cushion or bed around the divisions and sub-divisions of the blood-vessels and bile-ducts. This texture is diffused throughout the whole organ, enters into all its recesses, and with the blood-vessels and bile-ducts, interposes between the lobules. The elements of this texture are waved fibres and curled fibrils.

3. *The hepatic indusium,* or peritoneum.—A thin membranous texture, which limits the external configuration, and gives a smooth equable surface to each lobular sub-division, and to the whole organ. This texture is coherent cellular externally, and fibrous beneath, where it is continuous, and blends with the areolar texture just described.

4. *The coats of the larger divisions of the blood-vessels and bile-ducts.*—This is a strong fibrous texture, differing from areolar texture by the fibres being straighter and condensed into layers, which cross each other at right angles, and inclose among them cell-like bodies termed *nuclei,* numerous molecules, and granular or fatty particles. The elements of this texture therefore are fibres, nuclei, molecules, and granules; and its nutrient vessels are technically called *vasa vasorum.*—(IV., p. 92.)

5. *The mucous texture of the interior of the bile-ducts.*—The elements of this texture consist of cells and fibres; the cells at the free surface are denominated epithelial cells, and when detached from the texture in an early unmetamorphosed globular form, are called mucous cells, or mucous globules.

The lung is composed of the following textures and elements:—

1. *The pulmonary parenchyma.*—An elastic, coherent, cellular texture. The cells of this texture are comparatively very large, and inclose spaces filled with bubbles or vesicles of air. The elementary membrane forming the cell-walls is thin and transparent, but strong and elastic, and covered all over with a close network of non-secreting capillary blood-channels.—(IV. and V., p. 92.)

2. *The areolar texture,* with the same elements, and performing the same kind of office as the areolar texture of the liver.

3. *The pulmonary indusium,* or pleura, limiting the external configuration of the organ, and of the same nature with its analogue in the liver; and although we may give to the *indusium,* or to the *lobular indusia,* of one organ, one name, and to those of another organ, other names, still it behoves us not to neglect the identity of their structural elements, nor their physiological and pathological relations.

4. *The coats of the larger divisions of the blood-vessels and air-tubes.*

5. *The mucous texture of the interior of the air-tubes.*

6. *The fibro-cartilaginous and cartilaginous textures of the windpipe and larynx.*

In the leaves of plants, a coherent transparent non-secreting aëriferous texture, with air spaces and stomata, and an incoherent, secreting, corpuscular, chlorophylle texture, with a supporting frame-work and spiral vessels, are conjoined, and co-exist; whereas it would appear, from the details of the structure of the liver and lung, that in animal bodies, the coherent transparent, non-secreting, aëriferous parenchyma, with its necessary appendages of air-passages and air-tubes, and the secreting, endochrome, corpuscular texture, with its requisite ducts and outlets, are separated, and form two distinct organs.

In the lung, (V., p. 92,) the fibrous elements of the texture of the larger divisions of the blood-vessels and air-tubes are continuous with, and terminate in, the coherent, non-secreting, cellular parenchyma; so it appears in the liver, and probably in other secreting organs, that the fibrous textures of the blood-vessels and ducts are disseminated, (in the capillary channels,) among the secreting cells of the corpuscular parenchyma. (IV., p. 92.)

The analogous fact may be seen in the embryo chick, where the walls of the vessels of the *respiratory* allantois are quite different from those of the *nutritive* yolk-sac.

Of the several elements of the liver and lung here enumerated as typical of the composition of the organs of the human structure, it is to be observed, that some are general, some peculiar, and in all cases it is the peculiar parenchymatous elements that constitute the distinctive character and execute the special function. The slightly coherent endochrome, and transient cells of the hepatic parenchyma are peculiar to the liver; the strongly coherent, vascular, permanent, aëriferous cells of the pulmonary parenchyma, peculiar to the lungs; muscular fibrillæ, to muscles; and nerve-tubes to nerves. But the fibrous elements of the coats of the blood-vessels, and of the areolar texture, are general, so that no visible part of the body, however small, is without them. Hence, every perceptible alteration of structure involves not one only, but many textures,—the parenchymatous texture, the texture of the coats of the blood-vessels, the areolar textures, &c.

A retrograde metamorphosis in the parenchymatous texture of the brain, lung, joints, and bones, cannot take place without sundry degrees of morphological transformation in the contiguous textures. In the lung the fibrous texture of the coats of the blood-vessels, the fibro-corpuscular secreting texture of the air-tubes, the lobular indusia, the areolar fibrous texture between the lobules, and, finally, the pleura itself, all partake in the phenomenon. Thus, during the progress of consumption, there is an increased secretion from the air-tubes; a thickening of the interlobular areolar textures; destruction or thickening of the coats of the blood-vessels; and, finally, adventitious membranes and abnormal secretions on the pleura. If ulceration of the mucous texture of the air-tubes occur, the fibrous texture beneath is thickened and consolidated; and when the secreting texture of the alimentary canal softens and ulcerates, pseudo-fibrous membranes glue the convolutions of the bowel to each other, one texture retrograding into a fluid pus, whilst adjacent ones, of a higher type and different order, are becoming thicker and more consolidated,—scrofulous and inflammatory actions running on together, not in the same texture, but in the same organ.

Amidst the manifold phenomena, and the multitude of qualities and textures produced, during the growth of living bodies, and during the progress of scrofulous and inflammatory diseases, by the agency of cells, the following two events appear constant and influential:—

1. The enlargement of the capacity of some cells, the thickening and coalescence of their adjoining walls, and their durability in sundry forms as persistent elements of the fabric.

2. The transient existence of other cells, the thinning and dissolution of their walls, and the consequent discharge of their contents,—a gelatinous, fibrillating protoplasma, or a limpid secretion.

And as cells (I. and II.) are—

1. *Incoherent and fluid*, in blood, pus, &c.;

2. *Slightly coherent*, forming soft and brittle solids, in the brain, the hepatic parenchyma, and the corpuscular secreting textures; or,—

3. *Strongly coherent*, in the parenchyma of the lung, in the pith and leaves of plants, and in woody and osseous textures.

So the protoplasma may be—

1. *Incoherent, gelatinous, and fluid*, in lymph, liquor sanguinis, mucus, saliva, and other secretions;

2. *Slightly coherent and granular*, in the flakes and clots of pus, tubercle, tuberculous matter, &c.; or,—

3. *Strongly coherent and fibrous*, in coagulated fibrin, in the areolar and ligamentous textures, and in false or adventitious membranes.

Combinations of these cellular and protoplasma elements give rise to textures of sundry kinds, and of various degrees of cohesion,—to *gelatino-corpuscular*, or *gelatino-cellular*, *fibro-cellular*, *fibro-granular*, &c. In the egg of a bird we have an example of a gelatinous protoplasma, derived from cells in *the white*, and of a slightly coherent, cellular, or corpuscular texture (the cells abounding in granular matter,) in *the yolk*. And in all cases the normality or abnormality of the prevalent elements must be determined by the natural type or standard, by their conformability or unconformability to the law of the morphology, or the law of the growth and nutrition of the structure.

It has been shewn in the blood-vessels ministering to the growth of the transparent textures of the human embryo, that we are sometimes able to discriminate with the microscope the red blood in the centre of the vessel (*a*); a layer of protoplasma (*b*); the texture of the wall of the vessel (*c*); and the parenchyma (*b.*) (VII., *Fig. I.*, p. 117.) And it is evident, if unconformable elements accumulate in the protoplasma space (*b*), that they must, in the progress of nutrition, mingle with or supplant the normal elements of the coats of the vessel (*c*), and thence enter into the composition of the parenchyma (*d*), ultimately appearing in the secretion (or excretion,) if the texture be a secreting one, or being eliminated from a non-secreting (or non-excreting,) one, they constitute an abnormal discharge. Unconformable and incoherent cells predominating, alter the physical properties of the coherent textures; and if they supplant the normal elements, the texture is said to *ulcerate*.

In the blood-vessels which traverse the transparent, adult, fibrous, or areolar textures, we see no indication of a protoplasma space; nor do we find incoherent, cellular, or corpuscular forms interposing between the red current and the walls of the vessels, and it is on this account inferred that nutrition and growth are not going forward actively in such vessels. But when these textures become inflamed, not only are the vessels multiplied in number, but their walls become thicker; uncomformable, cellular, and protoplasma elements make their appearance between the blood-current and the texture, occupy the intervals between the normal fibrous elements, accumulate on the exterior of the vessels, and are cast off in the excretions. Hence, then, we see the propriety of the terms *protoplasma* and *protuphasma*; for lymph, in the ordinary acceptation of the term, is only one of the forms of the nascent, nutrient, metamorphosing matter; and the walls of capillary vessels differ in different textures, differ in the same place in the embryo and growing from the adult texture, and are subject to sundry alterations in inflammatory and scrofulous diseases.

(To be continued.)

ON THE PATHOLOGY AND TREATMENT OF PERTUSSIS.

By George Fife, M.D., Newcastle-onTyne.

On no disease of common occurrence, has a greater diversity of opinion apparently existed as to its true pathology or seat, than, even at this time, prevails in regard to that of hooping cough, If, in support of this statement, any evidence should be required, such is abundantly afforded by a consideration of the very numerous and diverse remedies which have been recommended for its mitigation or cure. Hence, no apology seems requisite for the obtrusion of the present remarks on this peculiar and interesting disease upon the attention of the Association. To enter into a full enumeration of the various causes to which it has been assigned, would occupy more of time and space, than the limits of this paper permit, consequently, for the present, I will restrict myself to the consideration of what may be termed the two principal doctrines which modern practitioners hold on the subject.

One of these parties may be said to maintain the inflammatory nature of hooping cough, and to consider it as essentially a form of bronchitis; the other regards it as a peculiar nervous and spasmodic disease, and specific in its character.

The former opinion I believe to be advocated by the majority of the profession, whilst to the latter, for reasons which will be apparent in the sequel, I, after extensive practical observation, and the most mature consideration, am disposed to give my support.

Fashionable as it now is to impugn and even to ridicule the nosological division of diseases by the illustrious Cullen, I am free to admit, that in his definition of pertussis, he has not only been most happy, but has also rested his views on what is perfectly compatible with the most recent pathology. His definition I will now therefore give, prior to entering upon the the more particular consideration of the pathology of the disease itself:—

"Morbus contagiosus; tussis convulsiva, strangulans, cum inspiratione sonora, iterata; sæpe vomitus."

The first proposition in the above, as it has but little reference to the actual nature of the morbid action going on, may be passed over with comparative brevity. Of the epidemic prevalence of hooping cough every practitioner of any experience must be perfectly satisfied, and but few will be found to deny, that if the term *contagious* be used as synonymous with *infectious*, even on this point the definition of Cullen is correct, and it is more than probable, that such is the sense in which it has been used, however objectionable it may be to confound infection, properly so called, with contagion, taken in its strict and literal sense. Of its infectious character I could adduce ample evidence, but it may suffice to state, that in many cases I have known it carried from places where the disease prevailed, to others in which no instance of it had previously occurred, and in the latter to become epidemic. From the repeated observation of this fact, I feel called upon to admit the accuracy of Cullen's definition, with the qualification of the term "contagious" being used synonymously with infectious. It is only necessary to add, that this affords farther proof of the "specific" nature of the disease, as a disease to be capable of propagation in such a manner, must have a specific character. In this respect, hooping cough follows the known laws of most diseases which prevail epidemically, and all of which, I believe, can and do occasionally assume the property of extension by infection.

The definition of the cough could not well be more accurate, as, brief as it is, when taken in connection with its generic position, it embraces all save one characteristic, viz., its occurrence in paroxysms, which will demand our especial notice hereafter. The term "convulsive" here may be taken as expressive of "spasmodic," and can therefore be subject to no objection; its "suffocative" character is equally unquestionable; whilst its being accompanied by sonorous and repeated loud inspirations, is the cause of the name "hooping" being given to the disease, and must therefore carry with it the assent of all. The last-mentioned phenomenon—"vomiting"—also demands particular attention, as it forms one of the main diagnostics of the disease, as will be presently shown. The only omission of consequence in the above otherwise very concise and truthful definition, is that of its occurrence in paroxysms, with an interval of health between them. When the above is compared with the symptoms of bronchial inflammation, we shall very readily perceive that the analogy is but remote, and that the disease under consideration, however frequently complicated with bronchitis, is essentially distinct from it. Another circumstance requiring notice is the occurrence of hooping cough but once in a life-time, whilst bronchitis may and does repeatedly attack the same individual, hooping cough also, for the most part, happening in the early years of infancy and childhood.

Let us now take a glance at the symptoms characteristic of inflammation of the mucous membrane lining the air passages, and then compare them with their concomitant physical signs,—with those met with in, and generally admitted as pathognomonic of, pertussis. Here again the definition given by Cullen, though under the term of catarrh, is sufficient to indicate the difference, which recent pathology confirms, as existing between the two diseases, as does also the position which he has given to it in his classification.

"Pyrexia sæpe contagiosa; muci ex glandulis membranæ narium, faucium, vel bronchiorum, excretio aucta; saltem hujus excretionis molimina."

Again, his division into species:—

Sp. 1. Catarrhus à frigore.

Sp. 2. Catarrhus à contagio.

Under the first of these may be included common or accidental attacks of bronchitis; whilst the latter, as obviously applies to what has now received the appellation of "Influenza." The above definition is somewhat imperfect as applied to bronchitis, as is also its position objectionable, as in it the primary stage of the disease, which is truly inflammatory, seems to have eluded observation, and the second only to have arrested attention. Without dwelling longer on the imperfections of such definition, I will, as briefly as possible, endeavour to make good the deficiency or error, and thereby indicate more clearly the difference between bronchitis and pertussis, merely observing that, like other inflammatory affections, bronchitis should have been placed under the head "Phelgmasia."

Bronchitis, like pneumonia, may, by careful observation, be very properly divided into stages, and it is in fact of the greatest importance to its successful treatment, more especially in infancy and childhood, to note such stages, as the therapeutic indications are seriously influenced by the pathological condition peculiar to them. In the commencement of an attack of bronchitis, the symptoms are the following, modified by the severity of the disease, and the extent of lung involved, as also by age and temperament, acceleration of breathing, with (in most cases,) pain on a full inspiration being made, which is also almost always productive of cough. The cough, which is generally present from the very commencement of the disease, in a greater or less degree, is at first dry, short, and hard, being unattended at this period by any expectoration; as the disease advances, expectoration of a frothy tenacious mucus takes place, which, as it becomes more free and easy, is accompanied by a very marked remission of all the symptoms. The cough throughout the whole course of bronchitis is *casual* in its occurrence, although repeated efforts are sometimes requisite to dislodge the mucus, when very viscid and tenacious. In an ordinary case of bronchial inflammation, the following are the physical signs:—

Percussion generally elicits a dull sound, which is regulated in extent by that of the portions of lung affected; thus it may be confined to a single lobe of one lung, or it may prevail over the whole of one or even both sides of the chest. When the stethoscope is applied in the early stage, we have the dry, sonorous, and subcrepitating rales in the affected parts, whilst in others, the respiratory sound will be so augmented as to claim the term "puerile." As the disease makes progress, the sonorous dry rale is lost, and we have in its stead the moist or mucous rale, this last being materially influenced in its character by the *tenacity* and quantity of the mucus, and also by the size of the tubes in which it is present.

The foregoing very brief and superficial notice of bronchitis has been given merely for the purpose of facilitating the comparison which must now be instituted between the two diseases, and for such end may prove sufficient. One other remark only is at present necessary, viz., these symptoms and physical signs, although they vary in duration and intensity according to the progress and duration of the disease, are continuous,—*i.e.*, unattended by any *real remission* or *interval of health*.

If we compare the symptoms of the two diseases, we shall readily, and by very unequivocal evidence, see that they are not only distinct in their nature, but also, on farther examination, find that they cannot co-exist. To such comparision I will now proceed:—

In bronchitis the fever corresponds with the extent and severity of the attack, and continues with little or no remission so long as the inflammatory action persists. The pulse is generally in a proportionate degree, accelerated and hard; the face is flushed; the eyes suffused; the cough is at first hard, dry, and though casual in its occurrence, distressing from its constancy; it is also seldom, if ever, terminated by vomiting; it finally becomes loose and less harsh, and is attended by expectoration; whilst the auscultatory sounds already described are always present, and gradually disappear as the inflammation subsides. Bronchitis occurs sporadically, and is peculiar to no period of life. Nor does the patient who has once suffered from it obtain any exemption from future attacks, but on the contrary rather acquires a greater tendency to it.

Hooping cough is generally met with during infancy and childhood. It seldom assails the same individual more than once in a lifetime. It most generally prevails in the epidemic form, and is capable of propagation by infection. The cough occurs in paroxysms, is spasmodic in its character, and is generally terminated by vomiting. Between the paroxysms there is an interval of apparent health, during which, even when the paroxysms are most distressing and violent, the patient makes no complaint. In a very large proportion of cases, percussion and the stethoscope afford no indications of disease, although in many cases there is more or less of the *mucous rale* audible, which of course is indicative of increased secretion into the bronchial tubes. This phenomenon deserves especial attention, as it may appear to indicate the presence of sub-acute bronchitis; it may, however, be explained independent of such condition, and therefore shown not in reality to militate against the view of the pathology of the disease which I am about to advocate.

What has now been said of the symptoms sufficiently indicates the difference between the symptoms and physical signs of the two diseases; hence, it is only necessary to take a brief glance at the pathological condition on which such difference depends, and which will be found to be important, not only in fact, but still more so as regards the successful treatment of either one or other. One prefatory remark may be made,

viz., that bronchitis very frequently supervenes on pertussis, or, in other words, becomes a complication of it, or, *vice versa;* this being made evident by bronchitis when the epidemic influence which generates pertussis prevails, terminating in the latter.

The pathology of bronchitis is now so universally understood, that it is superfluous to enter upon the *ratio symptomatum.* Not so, however, that of pertussis; wherefore, some little space must be devoted to the consideration of the phenomena met with in, and characteristic of, this very peculiar disease. The features which more especially call for notice are the following:—The character of the cough, its occurrence in paroxysms, and termination in vomiting; the interval of health between the paroxysms of coughing; the general absence of the physical signs invariably present in bronchitis. On each of these heads a few remarks may now be made, in order to demonstrate, by subsequent comparison, the real difference between *bronchitis* and *pertussis.*

First, the cough is spasmodic in character, occurs in paroxysms, and very generally terminates in vomiting. It has been well observed, that the violence and convulsive nature of the cough resembles that which arises from the presence of foreign bodies in the larynx; and that the larynx is very mainly implicated in its production, may be easily perceived by any one who will carefully observe the state of the child during the paroxysm, when, from the violent action of this organ and the contiguous muscles, it will be apparent that the chest itself is comparatively passive. The opposite is observable in cases of bronchitis, except where continued coughing is required to evacuate the viscid mucus, so commonly present in the earlier stage of the disease. The violence of the fits of coughing in pertussis forbids the idea of the existence of any continuous affection of the air-tubes as its cause; as, were such really the case, we should not only have serious febrile action, but also during the prevalence of such agency no interval of repose could by possibility have place. That the larynx is mainly concerned in pertussis, therefore, may be inferred; nor is this conjecture at all invalidated by the forcible and loud inspirations to which the "hoop," or "whoop," is properly attributed, such effort being physiologically requisite to compensate for the interruption which respiration sustains during a paroxysm. The termination of the cough by vomiting deserves especial attention, not only because it is a pretty constant occurrence in this disease, but also as tending to corroborate the view now taken of its pathology. In all probability this symptom has its origin in the participation of the stomach in the morbid condition already alluded to as affecting the larynx. Nor does the quantity of mucus discharged in this way in any degree militate against such supposition.

From these symptoms, together with the interval of comparative health, except where the case presents a complication with bronchial inflammation, I am led to consider the actual seat and nature of pertussis as essentially referrible to some morbid condition of the *pneumo-gastric nerve,* the influence of which over the organs of respiration and digestion is too well known to require comment.

The advocates of the inflammatory nature of hooping cough have laid considerable stress on the presence of the mucous rale during the intervals. If, however, the influence of the nerves generally, and of the *eighth* in particular, over secretion be considered, we shall in this sign even find corroboration of the nervous origin of the disease. This is farther supported by the immense quantity of mucus so frequently discharged from the stomach, to which fact is probably to be ascribed the notion of some of the older writers, that hooping cough was "*true catarrh of the stomach.*" From our still very imperfect knowledge of the nervous system, it would be little short of presumptuous in me, and most certainly idle, to enter into any speculations as to the real condition of the nerves in this disease; wherefore I will endeavour by a brief summary, to compare and point out the difference between this disease and inflammation of the air-tubes, premising that, with laryngeal or tracheal inflammation, it is impossible for any practical man for one moment to confound it.

Pertussis is essentially a disease peculiar to infancy and childhood. Bronchitis occurs indiscriminately at every period of life.

The cough in pertussis is spasmodic or convulsive, always occurs in paroxysms, and very frequently assumes a periodical type. In bronchitis it is casual in occurrence, however frequent and distressing, and rarely attended with vomiting, which is the common termination of the paroxysm in hooping cough.

In pertussis, the patient is comparatively well during the intervals; in bronchitis there is no *intermission,* although there may be some remission of symptoms.

Pertussis almost invariably occurs as an epidemic; bronchitis is of sporadic occurrence, but from any peculiarity in the atmosphere, or sudden vicissitudes in the weather, frequently prevails epidemically.

Hooping cough is unattended by fever; bronchitis in its mildest form, presents us with febrile disturbance. When fever is present in pertussis, it does not bear any proportion to the frequency or violence of the paroxysms; in bronchitis it corresponds with the extent and degree of the local affection.

The cough in bronchitis is unattended by the "whoop" to which pertussis owes its name, whilst in the latter, this pathognomonic symptom is lost, so soon as inflammation of the bronchial tubes actually sets in.

Finally, the treatment which alone is to be relied on in bronchitis, has little, if any, effect, either

in shortening the duration, or mitigating the severity of hooping cough.

The morbid appearances met with on examination of those who have died from this disease, may be supposed to favour the inflammatory doctrine, as in a large proportion of such cases bronchitis has been the cause of death; this, however, only confirms what has been already stated,—viz., that bronchitis frequently supervenes on pertussis. So far as my own experience extends, I would say that more fatal cases have been owing to the accession of cerebral than of pulmonary disease; the preponderance of the one or other appearing to be, in a very great measure ascribable to the progress made in the process of teething, during the operation of which a majority of fatal cases has been in consequence of the supervention of head symptoms, even when bronchial inflammation had been previously present. Thus, during one very general epidemic of hooping cough, in the treatment of which I was extensively engaged, about seventeen years ago, the most common fatal termination was either by convulsions or effusion into the cavities, and between the membranes of the brain.

From the length to which these remarks have extended, I must now be as brief as possible in regard to treatment. In hooping cough I have never seen any actual benefit result from depletion, except where active inflammation was in existence; on the contrary, positive injury appeared, in several instances, to follow its adoption. This observation applies both to the general and topical abstraction of blood, which seemed not only to exert no influence in diminishing the severity of the paroxysms, or curtailing the duration of the disease, but also to add to the already morbid sensibility of the system. Full emetics, repeatedly given, aided by alkalies, with cochineal, were, in the simple form of the disease, most efficacious; to which may be added, the internal and external employment of sedatives, as the hydrocyanic acid and the tincture of hyoscyamus internally, and friction of the spinal region of the chest, either with the soap liniment with opium, or camphorated oil, either of which I have found more useful than more stimulant embrocations. Of the emetics, ipecacuanha, alone, or in combination with small doses of the sulphate of zinc, has been preferred to antimonials. Where, in addition to the hooping cough, the patients suffered from bronchial irritation, the ipecacuanha wine, or the antimonial wine, was advantageously added to the alkaline mixture with cochineal. From papers which have been recently written on the utility of the carbonate of potass with cochineal, it may not be irrelevant to state, that such combination has been in use for a very long period, I having first met with it in a manuscript of formularies used by my late father, who copied it, when a young man, either in London or Edinburgh, and used it extensively in his practice. When the disease has persisted for some time, and circumstances permit, great benefit is derivable from change of air. During the earlier period, however, the observance of an uniform and rather warm temperature has the advantage of preventing the supervention of bronchitis, thereby materially lessening the danger of the disease, and also increasing the efficacy of other treatment.

CASE OF STRANGULATED FEMORAL HERNIA SUCCESSFULLY TREATED BY OPIUM.

By Charles Mayo, Esq., F.R.C.S., Surgeon to the County Hospital, Winchester.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

Sir,

Not observing that any other correspondent has given you the result of his experience in the treatment of strangulated hernia, after the manner recommended by Dr. Butler Lane, in the *Provincial Journal* of the 21st ult., I beg to send you the following case, which seems to be strongly confirmatory of his views.

Mrs. D., aged 67, became subject to femoral hernia on the right side about four years ago, at which time it was strangulated, and after some trouble I succeeded in reducing it by the taxis. Since that time she had worn a truss, and was careful to keep it reduced. The truss had now become broken and nearly useless. After some unusual exertion on the morning of the 24th of April, she felt a large portion of bowel suddenly to protrude, she became sick, took opening pills, and laid up. On the 25th she sent to me; I found the swelling as large as an egg, painful, and tender, from her having used much exertion in endeavouring to reduce it, or push it back, as she said. She was constantly sick. I gave her a cathartic enema, and used the taxis without effect. I then left her six pills with a grain of opium in each, desiring her to take one every hour till I saw her again, beginning at four p.m. At nine o'clock I found that she had taken four of the pills, that the vomiting had ceased after the first, and that she was quite easy; cold cloths were kept applied to the swelling, which remained immovable. As she was so easy, I advised the two remaining pills to be taken at intervals of four hours, another glister to be thrown up in the course of the night, and a cathartic draught to be given at six in the morning.

April 26th. I received a message this morning that Mrs. D. was completely relieved, and on my calling about twelve o'clock, I found that the fifth pill was taken at midnight, and the sixth at four in the morning; after this she felt completely relaxed all over, her bowels rumbled about, and the swelling seemed to be enlarged and distended with wind, but soon after on feeling it with her hand, it had become softer, and presently went entirely up under very slight pressure. She took the draught at six, it had operated satisfactorily, and she was delighted to sleep all the day after.

I was not less pleased to have the necessity for an operation to be superseded, which I had the day before considered as nearly inevitable. Dr. Butler Lane has so well set forth the *modus operandi* of this remedy that I have nothing more to add, than that if you consider this communication to be of any use as an encouragement to others to make such trials, it is quite at your service.

I am, Sir,

Your obedient Servant,

CHARLES MAYO.

Winchester, May 26, 1847.

OPIUM IN STRANGULATED HERNIA.

[The following case, reported by Dr. Richard Long, of Arthurstown, appears in the *Dublin Medical Press* for May 12, 1847, and taken in connection with the preceding case, and those reported by Dr. Butler Lane, will probably interest our readers.]

On the 11th of January, 1847, I was called to Mrs. P., aged 47, whom I found suffering from intense pain in the lower part of the abdomen; thirst insatiable; incessant vomiting of a brown coffee-coloured fluid; pulse small, 110; extremities cold; countenance anxious and sunken; bowels constipated. This had been her state ever since the evening of the preceding day, now sixteen hours.

On examination I found a firm inelastic tumour, about the size of a large egg, in the right groin, not very painful to the touch; the abdomen was slightly swollen, and very tender. It appears that she has had an inguinal hernia for several years, for which a truss used to be worn, but this for some time past had been laid aside.

As it was evident the gut was strangulated, I had the woman placed in a warm bath and bled her, and then tried reduction of the protruded bowel by the taxis without effect; a tobacco enema was thrown up, and the taxis again tried ineffectually. As I was now obliged to leave my patient, an anodyne draught was given, a pill containing half a grain of opium, and one grain of calomel ordered every hour, effervescing draughts occasionally, pounded ice to be kept continually on the hernial tumour, and the bath to be again used during the night.

I was prevented from again seeing Mrs. P. until noon of the 12th, when I found her situation most alarming. The pulse was at 126, small and hard; countenance still more sunken, and of a leaden hue; vomiting incessant and stercoraceous; abdomen more swollen and tender; hernial tumour unaltered; occasional hiccough. A tobacco enema of full strength was thrown up, and the patient again placed in a warm bath. Whilst she was under the complete influence of the tobacco, every prudent effort at reduction was patiently, but ineffectually tried. The necessity of an operation seemed now inevitable, but the patient or her friends would not hear of it. I therefore, as a *dernier resort*, determined to try what opium in large doses would do.

A pill containing three grains of opium and two grains of calomel was directed to be given every hour, and an enema of strong chicken-broth thrown up every fifteen minutes, in order to support her failing strength. The three pills first given were speedily rejected; the fourth and fifth were retained; a cessation of pain and vomiting followed, and by the time that eight pills were given an urgent desire to evacuate the bowels followed the administration of one of the broth injections, which led to relief and perfect recovery.

[Cases of the successful employment of opium and its preparations in the treatment of strangulated hernia, have been reported also by Dr. A. W. Davis, of Presteign, (*Provincial Medical and Surgical Journal*, Aug. 28, 1841.) Dr. David Bell, of Carlisle, (*Monthly Journal of Medical Science*, Sept., 1841; *Braithwaite's Retrospect*, v. 4., p. 149.) Mr. George Cooper, of Greenwich, two cases, (*Medical Gazette*, Feb. 18, 1842.) Dr. James Ross, (*Monthly Journal of Medical Science*, Jan., 1843; *Braithwaite's Retrospect*, vol. 7., p. 239.) Mr. J. M. Walker, of Newcastle-on-Tyne, (*Medical Gazette*, Jan. 12, 1844.) Mr. J. W. Rowlands, of Ironbridge, (*Provincial Medical and Surgical Journal*, Feb. 5, 1845.—Ed.]

REPORT OF THE DISEASES AND MORTALITY OF ROMSEY, HANTS.

By Francis Buckell, Esq., M.R.C.S.

January to March, 1847.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

Sir,

I have forwarded the following tables for insertion in the Journal, as an accompaniment to the meteorological observations recorded at Romsey.

With regard to the tables themselves, I would just remark, that thay are not strictly comparable with each other, inasmuch as the Sick Register is drawn from the practices of but two out of five practitioners; whereas the deaths and births apply to the entire district.

The proportion of measles is higher than would ordinarily occur in general practice, as about thirty of the patients were inmates of the poor-house.

Amongst the deaths is one from hooping cough, whilst this disease is not found in the Sick Register, no cases having happened, either in my own or the parish practice; and I believe but very few in the district.

I shall refrain at present from any farther observations on the tables, as it can be only by a lengthened series of such records that striking or important results are to be expected.

I am, Sir,

Yours respectfully,

FRANCIS BUCKELL, M.R.C.S.

Romsey, May 15, 1847.

TABLE OF DISEASES IN ROMSEY.

REGISTER OF DISEASE.

First Quarter—January, February, and March.

	Names of Diseases.	Under one Year	1 to 5	5 to 10	10to 15	15to 20	20 to30	30 to40	40 to50	50 to60	60 to70	Above 70	Male	Female	Jan.	Feb.	March	Total.	
Cerebral Diseases.	Epilepsy	...	...	...	...	...	1	...	...	...	...	...	1	...	1	...	...	1	23
	Convulsions	3	...	...	...	...	...	...	...	...	...	...	2	1	2	...	1	3	
	Paralysis	...	...	...	...	...	...	...	...	1	3	...	...	4	1	1	2	4	
	Other Cerebral Disorders.	...	...	...	3	...	4	...	3	...	1	4	8	7	8	6	1	15	
Diseases of Organs of Sense.	Diseases of the Ear	...	...	...	1	...	...	...	2	...	...	...	1	2	1	2	...	3	8
	Diseases of the Eye	2	...	...	...	2	...	...	...	1	...	...	1	4	2	1	2	5	
Pulmonary Diseases.	Croup	1	2	...	...	..	...	...	...	...	...	...	2	1	3	...	...	3	80
	Catarrh and Bronchitis	7	5	...	...	...	4	4	...	7	3	4	18	16	18	6	10	34	
	Influenza	5	5	1	...	1	3	...	1	...	...	...	8	8	10	6	...	16	
	Asthma	...	..	...	...	...	...	...	2	1	1	...	1	3	3	1	...	4	
	Congestion of Lungs	..	1	...	...	...	...	...	...	...	...	...	..	1	...	...	1	1	
	Pneumonia and Pleuro-Pneumonia	2	1	...	...	...	1	2	...	...	1	...	6	1	1	5	1	7	
	Pleurisy and Pleuro-Bronchitis	...	...	...	1	2	2	2	2	1	1	1	5	7	9	...	3	12	
	Phthisis	..	...	...	...	...	1	1	1	...	...	...	2	1	2	1	...	3	
	Pericarditis	...	..	...	...	...	2	...	...	...	...	...	1	1	2	...	...	2	
Diseases of Digestive Organs.	Dyspepsia	...	...	...	...	1	1	1	1	3	...	...	2	5	3	2	2	7	68
	Hepatic Disorders	1	...	..	...	...	...	2	2	2	...	1	2	6	2	1	5	8	
	Diarrhœa	...	2	...	...	...	3	5	3	1	1	2	11	6	10	2	5	17	
	Constipation	2	2	5	2	...	...	1	..	...	...	...	5	7	6	4	2	12	
	Colic	...	...	..	...	1	2	4	3	..	...	...	2	8	4	5	1	10	
	Worms	2	5	1	...	...	...	...	...	...	...	...	5	3	6	...	2	8	
	Other Diseases of Digestive Organs	1	...	...	...	...	4	...	1	...	...	...	4	2	5	...	1	6	
	Diseases of the Kidney	...	...	...	..	...	...	...	...	1	1	...	1	1	1	...	1	2	
	Eruptive Diseases	1	3	1	2	...	1	...	...	...	...	...	4	4	2	2	4	8	
	Scrofula	...	3	...	1	1	...	1	..	...	...	...	3	3	2	4	...	6	
	Rheumatic Diseases	...	...	...	...	3	1	6	7	1	5	...	18	5	7	7	9	23	
Fevers.	Remittent Fever	...	11	2	1	...	1	1	1	...	...	...	7	10	15	1	1	17	72
	Continued Fever	...	...	...	...	2	...	...	...	...	...	...	2	...	2	...	...	2	
	Measles	5	32	11	4	1	...	...	...	...	...	...	29	24	2	22	29	53	
	Debility	...	...	...	...	1	...	2	...	2	...	2	1	6	5	2	...	7	
	Uterine Disorders	...	...	...	...	5	1	1	...	...	...	...	...	7	4	1	2	7	
	Venereal Diseases	..	...	...	...	2	5	...	1	...	...	...	4	4	4	2	2	8	
	Miscellaneous	5	4	...	3	3	3	9	3	5	3	1	22	17	17	9	13	39	
	Total	37	76	21	18	25	40	41	33	26	20	15	178	175	160	93	100	353	

The above table is compiled from the Parish Register, and the list of Cases which have occurred in my own practice.

FRANCIS BUCKELL, M.R.C.S.

REGISTER OF MORTALITY.

Causes of Death.	Under one year.	1 to 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	Above 70	Male.	Female.	January.	February	March.	Total	
Cerebral Diseases.																		
Apoplexy	:	:	:	:	:	:	:	:	1	:	1	:	2	2	:	:	2	
Epilepsy	:	:	:	:	:	1	:	:	:	:	:	2	1	1	:	:	1	
Convulsions	3	:	:	:	:	:	:	:	:	:	:	1	3	2	:	:	3	
Hydrocephalus (Chronic)	:	:	:	:	:	:	:	:	:	:	:	:	1	1	:	1	3	
Paralysis	:	:	:	:	:	:	:	:	:	:	:	1	1	:	1	2	5	
Pulmonary Diseases.																		10
Congestion of Lungs	:	:	1	:	:	:	:	:	:	:	:	:	:	:	:	1	1	
Phthisis	:	:	:	:	:	1	:	2	:	1	:	4	1	:	2	3	5	
Bronchitis (Chronic)	:	:	:	:	:	:	1	:	:	:	1	1	:	:	1	:	1	
Bronchitis (Acute)	1	:	:	:	:	:	:	:	:	2	:	1	1	1	1	:	1	
Pneumonia	:	3	:	:	:	:	:	:	:	:	:	1	1	4	:	:	5	
Hooping Cough	:	1	:	:	:	:	:	:	:	:	1	:	:	1	:	:	1	
Asthma	:	:	:	:	:	:	:	:	:	:	:	:	1	1	:	:	1	
Diseases of Digestive Organs.																		15
Dentition	1	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
Thrush	1	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
Jaundice	:	:	:	:	:	1	:	:	:	:	:	:	1	1	:	:	1	
Diarrhœa (Chronic)	:	1	:	:	:	:	:	:	:	:	1	:	:	:	:	:	1	
Worms	:	:	:	:	:	:	:	:	:	:	:	:	1	1	:	:	1	
Hernia (Strangulated)	:	:	:	:	:	:	:	:	:	:	:	:	1	1	:	:	1	
Dropsy, Diseases of Heart, &c.	:	:	:	:	:	:	:	:	1	:	:	:	1	:	1	:	1	
Atrophy	1	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
Marasmus	:	1	1	:	:	:	:	:	:	:	:	2	:	1	1	:	2	
Rickets	:	:	:	:	:	:	:	:	:	:	:	1	1	1	:	1	2	
Cancer Uteri	1	:	:	:	:	:	:	:	:	:	:	:	1	:	:	1	1	
Measles	:	1	:	:	:	:	:	:	:	:	4	:	1	:	:	1	1	
Old age and general decay	:	:	:	:	:	:	:	:	:	1	2	1	3	1	:	1	5	
Found dead	:	:	:	:	:	:	:	:	1	:	:	1	1	:	:	:	1	
Total	11	7	2	:	:	3	1	2	4	5	9	16	25	16	9	16	44	

First Quarter—January, February, and March.

This Table and the Table of Births which follows, are taken from the Parish Register.

REGISTER OF BIRTHS.

Births.	*January.*	*February.*	*March.*	*Total.*
Male.	15	10	9	34
Female.	8	4	8	20
Total . .	23	14	17	54

REMOVAL OF A SCIRRHOUS TUMOUR OF THE BREAST: INHALATION OF ÆTHER.

By W. M. Trousdale, Esq., West Butterwick.

Mrs. Barnard, of West Ferry, aged 62, of bilious temperament, mother of two children, first perceived a small tumour on the lower part of the right breast about two years ago. Lately it had increased much in size, and become painful. It presented all the characters of scirrhus, being hard, circumscribed, and moveable. The skin covering its surface was slightly adherent and puckered, but the nipple not retracted, nor the glands in the axilla affected. On May 8th, I operated for its removal, in the presence of Mr. Robert Eminson, of Scotter, and my assistants. The vapour of æther was previously administered from Bell's apparatus. The patient inhaled it seven minutes, when she became perfectly insensible. The excision of the tumour was then effected in about three minutes, by two elliptical incisions, of seven inches in length, including the nipple, and a greater portion of the breast, and two small arteries required to be tied.

During the operation the patient talked deliriously, and appeared quite unconscious of what was being done. On her return to consciousness, which took place in ten minutes, she was asked whether she had felt any pain, and replied, "Not the least: I know nothing about it." Whilst inhaling the æther, her pulse rose from 75 to 110, but soon after subsided to 90. She complained of headache and considerable stiffness of the muscles for a few days, but had no other unfavourable symptoms.

Hospital Reports.

LIVERPOOL NORTHERN HOSPITAL.

A report of the medical cases treated at the Northern Hospital, during the year terminating 31st December, 1846, was lately read to the Liverpool Medical Society, by Dr. Turnbull, one of the physicians to the hospital. The following is an abstract of the paper:—

At present the hospital contains 104 beds, but it can accommodate 180 patients, when the completion of the docks at the north end of the town will render increased accommodation necessary. The institution was originally intended chiefly for the reception of accidents, and acute or urgent medical cases; and though it has, since the new building was opened, assumed more the character of a general hospital, the medical, as well as the surgical cases, are still chiefly of the same severe description. The severity of the cases arises from the hospital being situated near to the most densely populated and unhealthy part of the town, and from being also close to the docks and shipping. From the latter it received many bad cases of scurvy, dysentery, pulmonary consumption, and various organic diseases, which, from their nature, or from not being attended to at sea, are peculiarly severe and fatal.

During the year 1846, the number of medical cases admitted was 731; of surgical, 889;—that is, 1620 patients treated in the hospital. To these must be added 94 remaining from the preceding year, and 789 out-patients, (chiefly slight accidents,) making in all 2503.

Of the 731 medical cases, there were 59 classed as febrile diseases; 29 of these were cases of intermittent fever in seamen, most of them from the United States, and from the coast of Africa. In this class there was but one fatal case.

Of rheumatic affections there were 149 cases, three of which were fatal.

Of diseases of the nervous system there were 66 cases, and five of them fatal; three died from apoplexy, one from hemiplegia, and one from intoxication with rum.

Of diseases of the respiratory organs, there were 152 cases, 29 of which proved fatal. Of the latter, 17 were cases of pulmonary consumption.

Of diseases of the organs of circulation and of the blood, there were 30 cases, and eight of them proved fatal. There was one death from purpura hæmorrhagica, two from scurvy, and five from disease of the heart.

Of diseases of the stomach and intestinal canal, there were 155 cases; and of these, 20 were fatal. There were 105 cases of diarrhœa and dysentery, 16 of which died.

Of diseases of the liver, there were 21 cases, two of which were fatal.

Of dropsy, there were 33 cases, six of which died.

Of diseases of the urinary organs, there were five cases; of uterine diseases, ten; of secondary syphilis and skin diseases, 39; of diseases of the eye, four; and eight cases of other diseases not classified, including one fatal case of inflammation of the air passages from the fumes of nitrous acid.

The rate of mortality in 1846 was higher than usual. The total number of cases treated in the hospital, excluding those remaining from the preceding year, and out-patients, was 1620, and the deaths, 135, or one in 12; 731 were medical cases, of which 74 died, or one in $9\frac{7}{8}$. From comparing this with a table for the year 1843, I find that the mortality was above the average, 42 deaths having occurred in that year in 507 medical cases, or one in $12\frac{1}{4}$. That the mortality should have been higher than usual, does not, however, seem surprising, when we find, from the reports of the Registrar General, that it was much above the average over the whole kingdom, (50,000 in England and Wales above the average in 1846,) chiefly owing to the prevalence of diarrhœa and dysentery. In the Northern Hospital these diseases proved fatal in sixteen cases, thus standing next to pulmonary consumption, which was the cause of death in seventeen.

It should, however, be observed, that a higher rate of mortality might at all times be looked for in this hospital than in most others, owing to the ordinary state of health of the population from which it receives many of its inmates, and the severe nature of the cases. The annual mortality of the whole population of Liverpool is about one in 28; so that it would seem that the deaths among the medical cases during their period of sickness in the hospital was three times greater than among the whole population annually. The recent extensive emigration from Ireland, which

has brought many thousands of poor famished creatures, either already in a state of disease, or highly predisposed to fever and dysentery, has clearly shown that this high rate does not arise solely from unhealthiness of the town itself—of its resident population. From this debilitated class of persons, however, and from other non-resident classes—sailors and foreigners, a considerable number of our patients are furnished. The severe and urgent nature of the cases is also such, that it not unfrequently happens that patients are brought to us in *articulo mortis*, while others, who have just landed from ships, and have been long ill, survive but a few days.

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, JUNE 16, 1847.

We have received a copy of an Address from the Honorary Medical Board of the Liverpool Workhouse and Fever Hospital, to the ratepayers of the parish of Liverpool, which is fraught with matter of such immediate importance to the best interests of the public, that we deem it our duty to lose no time in bringing the subject to which it refers before the members of our widely extended Association. The town of Liverpool has been placed in an unfortunate position, by the immigration of so large a number of our suffering fellow-countrymen from Ireland, bringing with them as they did, not only the call for large pecuniary assistance, on account of their starving condition, but also the seeds of fatal disease, which has but too rapidly communicated itself to, and carried its ravages among, the native population. The great increase of fever cases appears to have led to increased demands for hospital accommodation by the district surgeons, for those who were the sufferers under it; and the parochial authorities, after a long period of indifference, were induced at last to take some steps to meet the evil, the growth of which has, no doubt, been greatly augmented by the want of earlier attention in this respect.

Under these circumstances it seems that "the Medical Board of the Workhouse was in the middle of February last," we quote the words of the address, "for the *first* time consulted, in the form of a call to sanction the appropriation of a part of the Workhouse, then occupied by the infirm and aged men, to the purposes of a fever-ward." The over-crowded state of the house very properly operated with the Medical Board in inducing them to refuse to sanction the introduction of fever-cases into the infirmary of the institution, or the appropriation of a ward as a fever-hospital, it appearing on an investigation, that there was "scarcely a ward in the house, for the reception of either healthy or sick, in which there were not twice as many persons as there ought to be, and that there were many in which there were four times the number."

The address goes on to show that, "at the time that this statement was made, the average cubic dimensions allowed for each of 601 persons, and his bed, was only 300 cubic feet, and that of this number, each of 289 had only 233 cubic feet, and that each of the remaining 312 had an average of 363 cubic feet. In other words, 601 persons slept in less than one-third, 289 of them in less than one-fourth, and 312 in little more than one-third of the space deemed necessary by the Commissioners of Prisons for the preservation of the health of the inmates of a gaol.

An arrangement was afterwards proposed, and cordially assented to by the Medical Board, by which "the whole of the Infirmary looking towards Brownlow Hill" was to be cleared out, for the reception of fever-patients; the medical, surgical, and lying-in patients, to be removed to wards selected by the Board in a new building.

In direct contravention of this arrangement, the Workhouse Committee removed a part of the inmates—the infirm and aged to cells "little better than under-ground cellars;" and the medical, surgical, and lying-in patients were "carried off in the dead of the night to the old nurseries, which had been disapproved of as wards by the Board, where they were found next morning, by the physician and surgeon in attendance, huddled together, in some cases two in a bed, and without any provision for their comfort, at a time when a very fatal epidemic of dysentery prevailed." The consequences may readily be anticipated. "On the 17th of April it was represented that thirty-seven men slept in eight beds, and ninety-six women and children in thirty-eight beds, and that eight cases of fever were removed to the fever-wards the next morning. On the 24th of April, twenty-one cases at least of fever were removed from different parts of the house to the ward in one day; fourteen deaths in the course of the week had taken place from fever and dysentery in the cleansing wards: a deputation from the Board on this day found twenty cases of fever in these wards, a general prevalence of severe dysentery, and, in one instance, three cases of fever in one bed."

It is unnecessary here to pursue the subject farther, excepting to state, that in the collision which necessarily took place between the Medical Board and the Workhouse Committee, and

subsequent investigation before an Assistant Poor-Law Commisioner, that functionary took part with the Committee; when, after a fruitless application to the Poor-Law Commission, the Medical Board feeling their efficiency to be at an end, with the utterly inadequate means placed at their disposal to enable them to discharge their duties properly, have withdrawn themselves from all responsibility, and from the charge of the hospital.

This cannot but be regarded under existing circumstances, as a public calamity to the town of Liverpool, and it is greatly to be feared the inhabitants will suffer *en masse* by this ill-judged parsimony, for we presume that the item of expense is at the root of the conduct of the Committee in thus opposing themselves to the wise precautionary recommendations of the Medical Board. With the contagious and fatal fever which exists in, or threatens, not only Liverpool, but most of the larger towns in the western districts, and from the same cause, it is earnestly to be hoped that every attention will be paid to those sanatory precautions, and especially the avoiding of over-crowding in Union Workhouses and other public establishments, which the knowledge and experience of the medical profession enable them to point out. The very trifling cost to the public, almost indeed inappreciable, at which the services of the medical profession are obtained in the charge of the sick poor, should at least facilitate the employment of all fitting arrangements for preventing the spread of contagious disease.

The greater part of the public and private medical charities throughout the kingdom, it is justly observed, are worked by Honorary Medical Officers. How the Union officers are remunerated may be learned from the subjoined extract:—"In the rich town of Liverpool, now proverbial for the amount of disease existing in it, the whole remuneration for skilled medical relief, under ordinary circumstances, exclusive of that afforded by the private charities, is less than £1600 per annum, being little more than one halfpenny in the pound of the annual value of the rateable property, and from £1120 of this, paid to sixteen district surgeons, is to be deducted the amount expended in supplying the pauper population with medicine."

We beg to direct attention to the announcement made in the last number, and repeated in another column of the present number, on the subject of the Council Prize. From the subscriptions and donations made to the Council Fund since its establishment at the last Anniversary at Norwich, the Committee there appointed to manage this fund have been enabled to offer the sum of fifty pounds as a prize for the best Essay or Report "On the Cerebral Affections of Infancy." Other subjects have been under consideration, and it is hoped that the fund for the succeeding year will be so far augmented, as to allow not only of some of these being proposed for competition, but at the same time of subjects of original research being named for investigation, and other measures being brought forward for the advancement of medical science.

Reviews.

A System of Surgery. By J. M. Chelius, Doctor in Medicine and Surgery, &c., &c. Translated from the German, and accompanied with additional Notes and Observations. By John F. South, late Professor of Surgery to the Royal College of Surgeons of England, and one of the Surgeons to St. Thomas's Hospital. London: 1847. 8vo. 2 vols. pp. clxvii., 814 and 1009.

We have great pleasure in announcing the completion of this truly important work, and it is no small credit, both to the translator and the publisher, that the promises of regularity of appearance made at its commencement have been fulfilled to the letter. Many works published in a similar manner, but far less elaborate, and with little excuse for failure in this respect, still linger in the hands of author or printer, the earlier numbers of which, already becoming obsolete, long preceded the appearance of the first instalment of the work before us, and it is with regret we learn that the publisher (if not the author,) is likely to be deprived, by the very merits of the work, in an extensive field at least, of the fair reward of his rare and commendable perseverance.

Any review of so comprehensive a work, in the limited space which we are able to devote to noticing the publications of the day, is out of the question; we are compelled, therefore, to a very brief exposition of its contents, with a general expression of approbation of the manner in which Mr. South has executed the translation, and an acknowledgment of the greatly increased value which the original work of Professor Chelius derives from the numerous comments in this edition. So numerous indeed are these, and so important to the elucidation of the subject treated upon, to its general literature and practical utility, that it cannot but be observed, that the "System," in its English dress, is as much the work of Mr. Smith as of its German author.

The "System of Surgery" of Chelius and South, as it may be justly termed, is arranged under eight sections or divisions. The first of these is devoted to the subject of inflammation; the second treats of diseases which result from the disturbance of physical continuity;

the third, of diseases dependent on unnatural coherence; the fourth, of those dependent on the presence of foreign bodies; the fifth, of diseases which consist in the degeneration of organic parts, or in the production of new structure; the sixth treats of loss of organic parts; the seventh, of superfluity of organic parts; and the eighth, and last, of the elementary proceedings of surgical operations. The first two divisions occupy nearly the whole of the first volume; the other six form the contents of the second volume.

We shall not stop to inquire into the merits of this arrangement, whether it is the best which might have been constructed, or whether in the following of it out, the several subjects succeed each other, in a natural or convenient sequence. The treatise is essentially a work of reference and consultation for the advanced practitioner, rather than a guide-book for the mere student; and any deviation from the various systems of arrangement which different individuals may prefer is more than compensated by the very copious analytical index, extending to nearly one hundred and eighty closely-printed pages. This index adds greatly, in our opinion, to the value of the work, as it enables those, with whom time is an object, at once to obtain an epitome of what is to be found in the body of the work, or any subject on which information may be looked for.

The Surgeon's Vade Mecum. By Robert Druitt, Fellow of the Royal College of Surgeons. Fourth Edition. London. 1847. Fcp. 8vo, pp. 620. With numerous wood-cuts.

The merits of this work are so well known and so justly appreciated, as to render it unnecessary to do more than briefly announce the appearance of another edition. It is, however, right to mention, that much new matter of interest to the surgeon has been added, chiefly in the practical parts of the work. Among these may be enumerated the sections on inflammation; on malignant diseases; the treatment of aneurism by compression; the section on diseases of the ear; and some very useful directions on bandaging, accompanied by illustrations. The number of the illustrations throughout is also very much increased, and, notwithstanding the acknowledged excellence of the preceding editions, the present will be found considerably to surpass them.

Proceedings of Societies.

SHROPSHIRE AND NORTH WALES BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ANNUAL MEETING.

The Annual Meeting of the Shropshire and North Wales Branch of the Provincial Medical and Surgical Association, and of the resident medical practitioners of Shropshire, was held on Friday, at Shrewsbury, May 28th, and was well attended by members of the profession from Oswestry, Wellington, and other towns.

P. Cartwright, Esq., of Oswestry, the President of the Branch Association, on taking the chair, observed, that in exerting himself to ensure a numerous meeting on that occasion, he had been influenced solely by the desire he felt, as President of the Association, to make himself useful to the profession. He thought advantage should be taken of the Parliamentary Committee now sitting on Mr. Wakley's Medical Registration Bill, to make the members of the legislature better acquainted with the wants and wishes of medical men, and something would, no doubt, result for their benefit. It was only necessary, in his opinion, that they should now come forward and make their grievances known, to gain all that was essential to the prosperity and usefulness of the profession, and raise its members in the estimation of society. By the Registration Bill a line of circumvallation would be drawn around the educated practitioner, broad and distinct, so as to separate the quack from those who possessed legal qualifications. He regretted to state that illegal practitioners too often received aid from those of the profession who ought not to encourage them. Mr. Wakley's bill was not, perhaps, all that could be desired, but that gentleman had done his best to simplify the measure, and adapt it to the present exigencies of the profession. He thought it was, at all events, sound in principle, and claimed the support of every member of the profession; and it also appeared to him that there were many points that would contribute to the protection and well-being of the profession.

In the present anomalous state of the profession, the general practitioner was excluded from the College of Physicians, and insulted by the Council of the College of Surgeons, and the profession, as a body, was left unprotected, and stripped of that collegiate and social standing which they had legally acquired at great trouble and expense. The Council had exercised the powers of their new charter invidiously, and the persons selected for the fellowship had no more claim to that distinction, on the score of merit, than the thousands on the college list who were passed over. If the selection had been confined to hospital and infirmary surgeons, and the right to elect the Council had not been granted to the fellows, he did not know that there would have been so much to complain of, but he thought they had a right to complain, when individuals were elevated to the rank of fellows to the great disparagement of others equally worthy of the title. The petition he should have the honour to lay before them would, he believed, embody their sentiments on the subject of the Registration Bill, and the more important subject of medical and surgical education, and he hoped their exertions might aid its being carried through Parliament.

The following resolutions were then adopted:—

1st.—Proposed by S. Wood, Esq., seconded by R. P. Weston, Esq.

"That the Medical Registration Bill, in forming a

legal distinction between those who are properly qualified to practice medicine and surgery, and those who are not so qualified, and in affording a legal recognition and sanction to practice to the qualified practitioner, is sound in principle, and deserving of the support of the Profession."

2nd.—Proposed by M. WEBB, Esq., seconded by R. BROUGHTON, Esq.

"That it is incumbent upon the legislature to provide, by every means in their power, for the suppression of *quackery*, by which the public are grossly imposed upon, and many valuable lives annually lost."

3rd.—Proposed by W. EDDOWES, Esq., seconded by T. PIDDUCK, Esq.

"That it is essential to the best interests of the Medical Profession, that one uniform standard of conjoint medical and surgical education, combined with practical examinations, be established, as a test of capability for practice for all those who shall hereafter enter the profession under any title whatsoever."

4th.—Proposed by J. DICKIN, Esq., seconded by Dr. DRURY.

"That the numerous corporate bodies having the power of granting degrees ought to be assimilated in the amount of qualification required for the attainment of each degreee of a like denomination, and that the Medical Registration Bill will be highly beneficial in effecting this object."

5th.—Proposed by E. BENNION, Esq., seconded by J. R. HUMPHREYS, Esq.

"That it is of the greatest importance to place before the Parliamentary Committee, appointed to enquire into the laws that govern the Profession, the evils that result from the irresponsible power possessed by the corporate bodies, more particularly the Colleges of Physicians and Surgeons, and to endeavour to obtain for the great body of the members of those colleges a just and fair system of representation therein."

6th.—Proposed by Dr. FULLER, seconded by SAMUEL WOOD, Esq.

"That the following petition be presented to Parliament in accordance with the views of this meeting:"—

To the Honourable the Commons of Great Britain and Ireland in Parliament assembled.

The Petition of the President and Council of the Shropshire and North Wales Branch of the Provincial Medical and Surgical Association, and of the resident Medical and Surgical Practitioners of Shropshire, in public meeting assembled,

Sheweth,—

"That your petitioners beg respectfully to impress their gratitude for the consideration you have evinced towards the medical profession by the appointment of a Committee to investigate the subject of medical registration and of the state of the law relating to the practice of medicine and surgery in these kingdoms.

"That your petitioners are of opinion that the grievances which affect the medical profession arise from the following causes:—

"1st. That ignorant and unqualified persons have the power of assuming, with impunity, professional titles and degrees, and thereby grossly and injuriously imposing on the public.

"2nd. That no uniform standard of conjoint medical and surgical education exists, and that divers colleges and bodies corporate have the privilege of granting degrees and titles at rates of education and qualification essentially differing from each other.

"3rd. That the Colleges of Physicians and Surgeons hold an irresponsible power, which, in the instance of the College of Surgeons, under their recent charter, has been arbitrarily and injuriously exercised towards its members.

"4th. That the Apothecaries' Company is the only body corporate capable of granting a licence to practise in England and Wales, and may thus interfere to prevent those from practising who possess higher qualifications than the members of that body.

"Your petitioners, therefore, considering it essential to the health and safety of the public, as well as to the improvement of the profession, that these grievances be redressed, entreat your Honourable House,—

"1st. That the Medical Registration Bill be passed into a Law.

"2nd. That one uniform and determinate standard of conjoint Medical and Surgical Education, combined with two or more practical examinations be established, and that no person after the passing of the Medical Registration Bill, be registered, or entitled to practise, who cannot produce testimonials of having completed such conjoint education and examination, excepting always those in actual practice at the time of the passing of such Bill, and qualified to be registered under it.

"3rd. That a just and fair system of *representation* be accorded to the great body of the members of the profession in their several Colleges, and, in particular, that the irresponsible power now possessed by the Colleges of Physicians and Surgeons, be so modified on the representative system, as to impart to those institutions a greater influence, security, and efficiency,

"And your petitioners will ever pray."

7th.—Proposed by W. HOWLETT, Esq., seconded by Dr. WILLIAMS.

"That the members of the county and the different boroughs therein be requested to support the Medical Registration Bill."

8th.—Proposed by Dr. DRURY, seconded by R. BROUGHTON, Esq.

"That the thanks of this meeting be given to PEPLOE CARTWRIGHT, Esq., for his impartial conduct in the chair, and for the unwearied energy with which he has, upon all occasions, exerted himself to promote the interests of the Medical Profession."

At the conclusion of the meeting the members and visitors adjourned to the dinner table, where, on the removal of the cloth, the healths of the various officers of the Association were proposed from the chair, which was ably filled by Mr. Cartwright; and the question of Medical Reform made the subject of extended comment and discussion by several gentlemen present. Altogether

the anniversary was both more numerously attended, and more gratifying in its results, than any similar meeting held in Shrewsbury for some years.

T. J. Drury, M.D., Physician to the Salop Infirmary, was elected President for the ensuing year.

BATH PATHOLOGICAL SOCIETY.

Fourth Meeting, Jan. 4th, 1847.

Mr. NORMAN in the Chair.

CASE XIV.—*Habitual palpitation of the heart; dyspnœa; distinct bruit, heard most clearly at the lower part of the sternum. Dissection:—Dilatation of the right side of the heart; diseased tricuspid valves.*

Mr. Waldron related the history of a case, with an account of the *post-mortem* appearances; the specimens could not be obtained. The patient, a woman about 63 years of age, first came under Mr. Waldron's care about eight or ten months previous to her death, at which time he learned that she had been much subject to palpitation of the heart from an early period of life. On examination there did not seem any enlargement of the left side of the chest; the action of the heart was irregular, and she complained of dyspnœa, which was increased by any exertion, palpitation at the same time being induced; the heart's action was accompanied by a bruit, heard most distinctly at the lower part of the sternum; there was also a thrilling sensation communicated to the hand when placed over the region of the heart; the pulse at the wrist was feeble and became intermittent on slight exertion. Her symptoms for a time appeared to yield to treatment, but after exposure to cold and over-exertion she was attacked with syncope and died without rallying. The body was examined forty-eight hours after death; the heart was found much enlarged, softened, and of a yellowish grey colour; the right cavities contained a considerable quantity of fluid blood; the right auricle was much enlarged; the tricuspid valves at their base were contracted and cartilaginous.

CASE XV.—*Acute tuberculization of the lungs; death in twenty-one days from first symptoms.*

Mr. Field exhibited portions of both lungs taken from the body of a girl, 15 years of age; her history is as follows:—Until within a week of the time Mr. Field first saw her, which was twelve days before her death, she had enjoyed tolerably good health, though never robust; she had never suffered under any pectoral symptoms, neither cough, short breathing, nor pain of chest. She had never menstruated. On examination she complained of slight pain under the sternum and in the region of the heart; percussion elicited an unsatisfactory sound beneath both clavicles, and beneath the right there was slight crepitation; the respiration was rather hurried, and the expansion of the chest imperfect; her pulse was quick and weak; no expectoration; her general appearance was that of a person labouring under serious disease, which, combined with the physical signs, led Mr. Field to consider the case as one of acute tuberculization. The last six days of her life she was very feeble. On dissection, both lungs were found minutely studded with miliary tubercles, all of small and uniform size. The specific gravity of both lungs was so much increased that they sank rapidly in water, and shewed but little tendency to float in a saturated solution of alum and nitre; there was slight thickening of the mitral valve, though not sufficient to render it incompetent for its office; the liver was enlarged and fatty; the brain and kidneys were not examined. The period within which the disease proved fatal was as nearly as could be ascertained twenty-one days. Mr. Field remarked on this case as illustrating a form of disease, rapidly and apparently certainly fatal, and alluded to similar cases that have been placed on record by Louis, especially one case, where the duration of the disease was as nearly as possible the same. Mr. Field then alluded to the question as one of much interest,—whether this acute form of tuberculization was to be considered as an effect of inflammatory action or not? and gave as one reason against such a view, that in acute tuberculization both lungs are almost invariably affected, whilst double pneumonia is comparatively rare.

CASE XVI.—*No history. Dissection:—Adherent pericardium.*

Mr. Bush exhibited a heart taken from the body of a man, about 70 years of age. Concerning his previous history there was not much known, except that he had suffered from a severe attack of what was called asthma, about six years before. On dissection, the pericardium was found very much thickened and adherent throughout; the heart was much enlarged, and the aorta more capacious than natural; the endocardium was healthy, and the valves sound; a portion of the pleural covering the right lung was adherent to the pericardium.

CASE XVII.—*No history. Sudden death. Dissection:—Rupture of the aorta.*

Mr. Hunt exhibited part of the arch of the aorta of a man, concerning whom he had no history, except that death had taken place rather suddenly. The portion of the aorta was much dilated, and presented a longitudinal (as regards the course of the vessel,) rupture of the internal coat; and at some distance from the seat of injury of the inner coat, was an irregular opening in the aorta through which the blood had escaped.

CASE XVIII.—*No peculiar nervous symptoms; sudden death. Dissection:—Calcareous deposit in the nervous matter of the cerebellum, and also in the arteries of the brain.*

Mr. Skinner exhibited a portion of the cerebellum of a middle-aged woman, in whom there had not appeared any peculiar symptoms referrible to the nervous system; death took place suddenly and unexpectedly. On dissection, the brain was found much congested; the arteries exhibited extensive calcareous deposit; the portion of the cerebellum shown was so loaded with calcareous deposit that there remained little appearance of nervous matter, except the form.

CASE XIX.—*Apoplexy, insensibility, complete paralysis of the left side. Dissection:—Effusion of blood into the right lateral ventricle; calcareous deposit in the arteries at the base of the brain.*

Mr. Norman exhibited the brain of a man, 75 years of age, who had suffered about six years before his death from what seemed an apoplectic fit; he recovered perfectly, but has since been subject to occasional threatenings of a similar nature, which, in more than one instance, seemed to have been warded off by depletion. On Friday, the 1st of January, he had an attack similar to the first, followed by almost complete insensibility and perfect paralysis of the left side; he remained in this condition about forty-eight hours, when he died. On dissection there was found a large clot of coagulated blood, occupying chiefly the right lateral ventricle, the pressure of which, against the roof of the ventricle, had given rise to the appearance of softening; but on making a section into the nervous matter, such did not seem to have been the case. Some blood had found its way into the left lateral ventricle, but not into any of the other cavities of the brain. The precise source of the hæmorrhage did not appear. The arteries at the base of the brain were much diseased, especially the basilar, which was merely a rigid tube from the deposition of calcareous matter.

CASE XX.—*Chronic rheumatism; some degree of lividity of countenance; physical signs of obstruction of the left side of the heart, with hypertrophy: sudden death. Dissection:—Aneurism of the left ventricle.*

Dr. Davies exhibited a heart taken from the body of a young man, 21 years of age, who was admitted into the hospital suffering under chronic rheumatism. It appeared that about three months before his admission he had had an attack of acute rheumatism, for which he had not received any medical advice. He had no recollection of having suffered from pain in the region of the heart, but thought that lately he had been less able to exert himself than formerly. On examination, the countenance appeared rather livid and anxious; respiration quick and shallow; the pulse was small, frequent, and gave a thrilling sensation to the finger. His position in bed was on the back, with the shoulders raised. Percussion over the region of the heart gave a dull sound over a larger space than natural, whilst the impulse of the heart was attended by a general heaving of the left side of the chest.; the second sound of the heart was obscured by a distinct but not very loud bruit. The respiratory murmur in both lungs was feeble. A few ounces of blood were taken from the arm, which did not separate well into clot and serum, but formed a dark-coloured diffluent mass, much resembling blood drawn in typhus fever. His symptoms underwent no change during the four days he was in the hospital, when, on rising from his bed he fell suddenly back, and died within an hour. On dissection, eighteen hours after death, the heart was found much enlarged; the pericardium universally adherent, and greatly thickened. On laying open the left ventricle, there was found, immediately within the left aortic valve, an aneurismal sac, about the size of half a walnut; the other two valves were thickened and contracted; the aneurismal sac was filled with partially decolourized lymph and coagulated blood, the lymph being external. The endocardium around the aneurism was covered with thin layers of lymph, and at one point distinct from the aneurism, there was a small ulcerated opening through that membrane. On opening the left auricle, there was found a patch of lymph, exactly opposite the aneurism, showing where rupture would have occurred, had not death prevented such an event; the wall between the two cavities was at this point very thin. The right cavities did not present anything uncommon; the lungs were much congested, otherwise healthy; the liver and spleen were enlarged, the former weighed six pounds ten ounces; the brain was congested, and the blood fluid, so that several ounces flowed out whilst dissecting that organ.

Dr. Davies remarked on this case as being one of by no means frequent occurrence, and as furnishing a clear example of aneurism of the left ventricle, arising from inflammation of the endocardium, terminating in ulceration and rupture of that membrane, and probably softening of the muscular tissue beneath, and thus, by means of the successive impulses of the blood, permitting a cavity to be hollowed out in the muscular structure of the wall of the heart.

TOTAL ABSTINENCE, AND MEDICAL TESTIMONY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Nothing could be farther from my intention, than to excite the angry feelings of your intelligent correspondent θ, by any apparently harsh observations on the important subject of his letter: I intended no such thing; and much regret that θ should imagine for one moment such to be the *animus* of my expressions. The cause of truth needs no such vulgar an attendant as anger, and I leave all irritation,—all suspicion of offence, to the steady defenders of an established error. I am content, if my observations should elicit thought on this momentous subject; and although a considerable number of observing and experienced physicians and surgeons differ *toto cælo* from my opinions, yet that is *no reason* for their incorrectness.

I need not remind your correspondent, that all new opinions which make breaches in the citadel of our established habits, must of *necessity* be adopted slowly; and I only wonder that the principles of the four disputed propositions have been so largely sanctioned and adopted—a pretty sure proof of their correctness, and that in time they will be generally believed.

I quite agree with θ, in his right of investigating and judging for himself in this matter, but he must also grant me the permission to put his opinion in one scale, and the recorded views of the eminent men before-mentioned in the other scale, and then we shall see whether the *argumentum ad verecundiam*, whose support, he says, my cause appears to need, does not apply to himself, and his position: perhaps, indeed, θ belongs to that class described by Cicero as "*Homo timidus virginali verecundia.*"

I must beg to correct a statement in reference to my having characterized your correspondent's *observations* as absurd and ludicrous; but the gist of my statement was, that the *position of a nameless individual* was absurd; or in other words, that there was something of the ludicrous in a nameless individual attacking the deliberate opinions of some half dozen distinguished men; and to this view I still adhere. θ is too acute an observer not to see that a man's position may be weak, while his opinions may be very well expressed, although ever so erroneous.

It would require a volume to receive the evidence in favour of the truth of what θ says is *unproved*, and every man's experience, I believe, would afford him abundant testimony in favour of the fact "that a very large portion of human misery, including poverty, disease, and crime, is induced by the use of alcoholic or fermented liquors as beverages." I rejoice, however, that θ "freely grants" there are persons to whom total abstinence is both on physical and moral grounds desirable, and I surmise that after all we are perhaps only differing in degree rather than in principle. I am no advocate for *universal* pledging, but I know, in many cases, the pledge is the only security for a man. It is only the other week I sent a patient (a medical man,) to an asylum, who, had he taken the pledge some time since, would in all probability have been now at his daily duties; but no, he would not pledge himself, because he thought the *use*, and not the *abuse*, of a little stimulus, could do him no harm. I must again request θ to read Liebig's tenth letter before referred to, as evidence that beer and spirits are not elements of nutrition, and therefore do not promote the formation of blood; neither are they even *necessary* elements of respiration, else how would all the tribes of animals exist? They drink not but at Nature's stream. The North-American Indian, before he saw the white man, lived long, and was happy, but the demon of ardent spirits came, and poisoned him by thousands. I trust the equanimity of your correspondent will not be disturbed by any of my observations; if it be I must really throw down my pen in despair, and believe that a delusion has hold of his mind, which nothing short of teetotalism will remove.

In conclusion let me say that in discussing this subject controversial strife should be avoided, and as I am anxious that the profession should lead the public mind, I beg my brethren to consider the statements made, and judge for themselves.

I remain,

Yours respectfully,

EDWARD HUMPAGE.

Bristol, June 4, 1847.

P.S. I do not reply to Dr. Robertson's remarks, written as they are in an excellent spirit, because in the first place they were not addressed to me; and, moreover, his objections are in part answered in this correspondence.

INJURIOUS EFFECTS OF THE INHALATION OF ÆTHER.

[The following observations on the injurious effects of the inhalation of æther, are extracted from a letter lately published by Dr. James H. Pickford, of Brighton.]

The blood, robbed by the æther of its oxygen, impoverished by the solution by the same agent of myriads of corpuscles, of those especially with which it comes into immediate contact, depreciated as a consequence, in the quantity and deteriorated in the quality of its fibrin, intensely blackened by the solution of its corpuscles and their contained hæmato-globulin, is chemically deprived to a considerable extent of its powers of coagulation and rendered unfit for the purposes of life. A black vitiated blood circulates through the system, analogous in many particulars to that in putrid and malignant fevers.

This impaired condition of the blood is not even partially corrected until respiration of atmospheric air has been permitted for some considerable time, and until lymph corpuscles have found their way into the circulation to replace those of the blood destroyed by the æther. Many persons, especially those who are out of health or enfeebled by long previous disease, are hours, days, nay weeks, recovering from the state induced by the inhalation; many die from its direct effects,—from the want of oxygenized and vitalized blood to stimulate healthfully the brain and nervous system.

With a view to counteract some of the ill consequences of ætherization, it has been proposed that the patient should inhale oxygen gas, "as *an antidote*." This, of necessity, presupposes the exhibition of a *poison*. So that a patient about to undergo operation is to inhale a poison, be subjected to its deleterious effects, and then to swallow an antidote, as though the operation were not of itself sufficient, without all this extra complication of poison and antidotes, suspended animation or actual death, proximate or remote.

But what are the facts? Ætherized blood cannot be reddened by oxygen gas, simply because its black red colour is not dependant alone on a chemical change in the hæmatin. The æther has also dissolved the blood-corpuscles, and thus permitted the escape of the contained hæmato-globulin; and these it cannot restore. Had the blood been merely rendered artificially venous by the absorption of its oxygen, or by cutting off its ordinary supply, its arterial colour would be restored by agitating it with oxygen. In the following experiment, these facts are pretty clearly established.

In each of two vessels I caught eight and a half ounces, by weight, of arterial blood; both vessels were instantly plunged in water at a temperature of 98° Fahrenheit. The blood in one vessel was exposed for three minutes to the influence of the vapour of æther. The blood became of an intensely black red colour, whilst coagulation was to a very considerable extent interrupted. Subsequently, oxygen gas was diffused through the ætherized blood; but no restoration of colour could be produced. Placed in the field of a powerful microscope, numerous flocculi, the remains of the capsules of the corpuscles, were observed floating in the fluid portion of the blood, which was rich with these remains. At the

expiration of 72 hours, the blood in both vessels was weighed—that which had been subjected to the vapour of æther yielded *five and a half* ounces of black red *fluid*, and three ounces of a stringy *clot*, conclusive evidence of the small amount of fibrin. The fluid portion of the blood (serum) in the other vessel, in which neither flocculi nor corpuscles could be detected under the microscope, weighed *half* an ounce, the *clot*, *eight ounces*.

This indisposition of the blood to coagulate after the inhalation of æther offers another very serious consideration. Fatal hæmorrhages must occur, and do occur; and as the whole circulating fluid is deteriorated by the æther, is it matter of surprise that the lips of wounds evert, that the discharge is unhealthy, that stumps become flabby or gangrenous, and that patients sink and die?

Ætherization, it is to be feared, exerts also a baneful influence directly upon the respiratory organs. A medical friend in Dublin informed me recently that of thirty fatal cases following operations in which æther had been employed in the various hospitals of that city, eight were found to be the subjects of recent tubercles of the lungs, the undoubted product, it was believed, of inhalation.

The endeavour to alleviate human suffering under one of the most trying of all situations, the knife of the surgeon, is highly praiseworthy, and the public must feel deeply indebted to those medical gentlemen who have devoted their time and talents in the attempt to achieve so desirable an end. It becomes us, however, to ascertain, as far as we are able, whether the means employed are compatible with the health and lives of those about to undergo operations.

Pain during operations is, in the majority of cases, even desirable; its prevention or annihilation is, for the most part, hazardous to the patient. In the lying-in chamber nothing is more true than this: pain is the mother's safety, its absence her destruction. Yet are there those bold enough to administer the vapour of æther even at this critical juncture, forgetting it has been ordered that "in sorrow shall she bring forth."—*Brighton Guardian*, June 2nd.

General Retrospect.

ANATOMY.

VULVO-VAGINAL GLAND.

M. Huguier has given a description of a gland situated at each side of the junction of the vulva to the vagina. It was discovered by Gaspard Bartholin, and was generally described by older anatomists; but of late its existence has been almost forgotten. According to M. Huguier, this gland is about the size and form of an apricot kernel, and is provided with an excretory duct, about seven or eight lines in length, the external aperture of which is situated in the angle between the vulva and the border of the hymen. This gland is small until puberty, when it is developed with the other organs of generation; it becomes turgid during sexual excitement, and secretes a quantity of clear mucus-looking fluid, which it is said to ejaculate with some force. M. Huguier agrees with former anatomists in regarding this gland as closely analogous to Cowper's gland in the male subject, for it is situated in about the same part of the perineum as this latter is, and presents the same anatomical relations and connexions. It is an appendage to the vulvo-vaginal cavity, a part which is analogous to the urethra in the male; it receives the materials for its nutrition and its sensation from the same vascular and nervous sources as does Cowper's gland; it presents also many varieties in form, size, and situation, and it may be absent on one or both sides, as is often the case with Cowper's gland.—*Archives d'Anatomie.*

PHYSIOLOGY.

INFLUENCE OF THE PNEUMOGASTRIC NERVES ON DIGESTION.

The results of some experiments performed by MM. Bouchardat and Sandras, to determine the influence possessed by the pneumogastric nerve over digestion, shew clearly that division of both these nerves in the neck, at once arrests the process of digestion so far as the stomach is concerned, but has no influence over that part of the process which takes place in the intestines. After feeding dogs with a mixed diet, and then dividing both pneumogastric nerves, they found, after twenty-four hours, that those substances, the digestion of which is effected principally in the stomach, such as albumen and fibrin, were quite unchanged, whereas those substances which are digested in the intestines, such as the amylaceous and fatty principles, had been dissolved and absorbed just as though the pneumogastric nerves had been undivided. In several of these experiments they found that, although no chyme is prepared in the stomach after division of the nerves, yet the starchy principles which pass into the intestine are there converted into glucose, and that the fatty matters are absorbed by the lacteals, just as in the ordinary state of health; so that the digestion and disposal of these principles appear to be quite uninfluenced by the operation. They found also that it is not by compression of the trachea, by the distended œsophagus, that rabbits die when fed after division of the pneumogastric nerves as high up as on a level with the larynx.—*Comptes Rendus*, Jan., 1847.—*Medical Gazette*, April, 1847.

ON THE FOOD OF CHILDREN.

By Dr. Thompson.

[After some remarks on the relative quantities of nutritive matter in various articles of diet, Dr. Thompson makes the following useful observations on the appropriate food of children.]

"Milk, in some form or other, is the true food of children, and the use of arrow-root, or any members of the starch class, where the relation of the nutritive to the calorifiant matter is 1 to 26, instead of being as 1 to 2, by an animal placed in the circumstances of a human infant, is opposed to the principles unfolded in the preceding table. In making this statement, I find that there are certain misapprehensions into which medical men are apt to be led at the first view of the subject. To render it clearer, let us recal to mind what the arrow-root class of diet consists of. Arrow-root and tapioca are prepared by washing the roots of

certain plants until all the matter soluble in water is removed. Now, as albumen is soluble in water, this form of nutritive matter must in a great measure be washed away; under this aspect we might view the original root before it was subject to the washing process, to approximate in its composition to that of flour. If the latter substance were washed by repeated additions of water, the nitrogenous or nutritive ingredients would be separated from the starchy or calorifiant elements, being partly soluble in water, and partly mechanically removed. Arrow-root may therefore be considered as flour deprived as much as possible of its nutritive matter. When we administer arrow-root to a child it is equivalent to washing all the nutritive matter out of bread, flour, or oatmeal, and supplying it with starch; or it is the same thing approximatively as if we gave it starch; and this is in fact what is done, when children are fed upon what is sold in the shops under the title of "Farinaceous Food,"—empirical preparations of which no one can understand the composition without analysis. Of the bad effects produced in children by the use of these most exceptionable mixtures, I have had abundant opportunities of forming an opinion, and I am inclined to infer that many of the irregularities of the bowels, the production of wind, &c., in children, are often attributable to the use of such unnatural species of food. It should be remembered that all starchy food deprived of nutritive matter is of artificial production, and scarcely if ever, exists in nature in an isolated form. The administration of the arrow-root class is therefore only admissible when a sufficient amount of nutritive matter has previously been introduced into the digestive organs, or when it is inadvisable to supply nutrition to the system, as in cases of inflammatory action. In such cases the animal heat must be kept up, and for this purpose, calorifiant food alone is necessary. This treatment is equivalent to removing blood from the system, since the wasting of the fibrinous tissues goes on, while an adequate reparation is not sustained by the introduction of nutritive food. A certain amount of muscular sustentation is still, however, effected by the arrow-root diet; since, according to the preceding tables, it contains about one third as much nutritive matter as some wheat flours. The extensive use of *oatmeal*, which is attended with such wholesome consequences among the children of all ranks in Scotland, is, however, an important fact, deserving serious consideration, and it appears to me, is strongly corroborative of the principles which I have endeavoured to lay down.—*Experimental Researches on the Food of Animals*, 1846, p. 169—171.

PATHOLOGICAL CHEMISTRY.

CHEMISTRY OF THE BLOOD.

In a work which is noticed in the *Monthly Journal* for May, 1847, Professor Haeser has analysed the hæmatological investigations of Andral, Becquerel, Rodier, and others, and considers the following aphorisms warranted by his results:—

1. The average composition of the healthy blood is probably the following—22, fibrin; 131 blood-corpuscles; 70, albumen; 6.8, salts; 210, solid matters generally; 790 water.

2. The most general effect produced by acute diseases upon the blood consists in the diminution of its solid matters in general, and especially of its blood-corpuscles. The only exception to this rule is to be found during the first stage of typhus, scarlatina, and measles. Whilst the blood-corpuscles appear thus diminished, the solid residue of the serum, especially the albumen, is to be met with in greater amount; the same is the case with respect to the fibrin.

3. During the progress of acute diseases, the blood-corpuscles become yet more diminished, and simultaneously the solid matter of the serum is also undergoing diminution; it is only the fibrin that is sometimes increasing, even during the progress of genuine inflammatory diseases, whilst it is also diminished in the "pyrexiæ." The same effect as occurs in advanced disease, can generally be produced by blood-letting.

4. Concerning the special character of the true inflammatory processes, we meet with the following characteristic alterations of the blood—Diminution of the alkaline salts, moderate increase of albumen, and a considerable one of fibrin. Besides this, there appears an incorporation between fibrin and albumen, and a direct one between the former and water.

5. Pneumonia is chiefly characterized by a great amount of fibrin; pleuritis, by that of albumen; bronchitis, by a comparatively slight alteration in the composition of the blood.

6. In acute articular rheumatism, the blood differs from that in genuine inflammations only by the greater diminution of blood-corpuscles, and the corresponding abnormal amount of the solid residue of the serum, and of the water. Another particularity of the rheumatic blood is the normal quantity of the salts, and the steadiness of the amount of fibrin.

7. In the fever accompanying the pyrexiæ, we do not recognize any constant alteration, either in the solids or in the blood, capable of explaining their essential character—(Andral.) In typhus fever we observe the following alterations—Till the eighth day of the affection the blood-corpuscles, together with the albumen, and in consequence of these, the solid matters generally, are in undue amount; after that time a progressive diminution of all the solid substances takes place, occurring in the blood-corpuscles most, and the fibrin least. On the twenty-first day the general increase of the solid materials returns again. One or two blood-lettings, made during the first eight days, produce but a slight influence upon the composition of the blood; whilst at a later period the blood-corpuscles are thereby very considerably diminished.

8. Acute articular rheumatism, simple erysipelas, and puerperal peritonitis, considered as to the composition of the blood, form a group which differs from inflammation as well as from typhus fever, by the considerable quantity of water, serous residue, and fibrin induced, and by the extraordinary diminution of the blood-corpuscles. The analogy between the three diseases just mentioned becomes still more obvious on considering the exudations in them, the water and albumen of which, compared with the composition of the blood, are much increased. At a later period, and

after blood-lettings, puerperal peritonitis approaches very nearly to typhus fever.

9. Variola, scarlatina, and rubeola, constitute also a natural group, so far as the composition of the blood is concerned. To the two last-named diseases the undue amount of solid matters in general at their commencement, and the constant increase of albumen and alkaline salts, seem to be characteristic. Hence these diseases approach on the one hand to the erysipelatous, and on the other to the typhus, composition of the blood.—*Ueber den Gegenwartigen Standpunkt der Pathologischen Chemie des Blutes.*

SOURCE OF FALLACY IN TESTING THE URINE FOR SUGAR.

Dr. Rees has pointed out the fact, that the dark colour produced by boiling the suspected urine with caustic potash (Moore's test,) is not satisfactory, unless the purity of the potash be first ascertained. He was led to this knowledge by having failed to detect sugar in a specimen of urine said to be diabetic, when it occurred to him that the dark colour met with by the party sending the urine might be due to the presence of lead in his potash, which was found to be the fact by testing it with hydro-sulphuret of ammonia.—*Medical Gazette*, April 2nd.

[This hint is valuable, and as far as our recollection goes, original, on the part of Dr. Rees.]

SURGERY.

RESULTS OF THE OPERATION FOR STRANGULATED HERNIA.

In the hospital practice of MM. Boyer and Manec, since the year 1833, fifty-eight operations for strangulated hernia have been performed, the results of which are interesting, as regards the propriety of employing the *taxis*. Thirty of these cases were operated upon by M. Boyer. From 1834 to 1839 M. Boyer did not proceed to the operation till prolonged attempts at reduction had been made; during this period *nine* cases were operated upon, of which *eight* died and *one* recovered. From 1839 to 1843 he employed the taxis to a much more limited extent; *seven* cases were submitted to operation, of which *four* died and *three* recovered. From 1843 to 1846, he had almost entirely abandoned the use of the taxis, and out of fourteen cases on which he operated, *four* died and *ten* recovered. M. Manec, on the contrary, during the same time, placed little reliance on the taxis, and uniformly proceeded almost at once to the performance of the operation. The results of this practice were, that of *twenty-eight* cases operated on, *two* died and *twenty-six* recovered.

The practical deduction to be drawn from these statistics is, that the employment of the taxis is productive of much harm. No statement, however, is made as to the results of the cases which were successfully treated by the taxis. To judge fairly of the good or evil resulting from the attempts at reduction, the entire number of cases of strangulated hernia admitted into the hospitals should be given, and we doubt not that in such an aggregate of cases, the number of recoveries would be greater where the taxis is moderately and judiciously applied, than where the operation is uniformly at once performed.

The conclusions drawn by MM. Boyer and Manec are, that the operation for hernia, performed at an early period, and before symptoms of peritonitis have declared themselves, is almost free from danger; and, 2nd, that peritonitis never occurs subsequently to the operation, if it has not been present previous to its performance.—*Revue Medico-Chirurg.*, Fevr., 1847; and *Monthly Journal of Medical Science*, May, 1847.

CURE OF NÆVUS.

In flat nævi up to the size of a crown-piece, lint steeped in pure liquor plumbi is fastened over the part with a bandage, and wetted by fresh applications of the lead, without frequent removal. After days or weeks, the swelling becomes whiter, flatter, and firmer; soon afterwards, little, firm, white spots form on the surface, and the cure is certain. By means of a solution of alum and compression, nævi so large that extirpation would have been impossible have also been curred. It may be necessary to keep the remedy constantly applied for six months.—*Dieffenbach's Operative Surgery*, and *Half-Yearly Abstract*, Vol. IV.

MIDWIFERY.

ON THE NATURAL PERIODS OF DELIVERY.

Dr. Leroy has observed the following circumstance in connection with the period of delivery:—1st, the natural term of delivery, as well as premature delivery, has a certain connection with the monthly periods; 2dly, the return of these periods during the whole duration of pregnancy agrees with the period of the month corresponding with the date of the day on which the catamenia commenced to appear for the last time, whatever may be the number of days reckoned to each month; 3dly, the premonitory symptoms of delivery at the natural period commence, in the majority of females, at the date mentioned, or during the succeeding seven days; 4thly, nevertheless, the commencement of the expulsive pains may still occur in the normal manner, at the fifteenth day of the tenth month; 5thly, every delivery which occurs before the date mentioned may be considered to be accelerated; 6thly, every delivery which occurs after that date may be considered to be retarded; 7thly, the accelerations are proportionably much less numerous than the protractions; most commonly they do not precede the time specified by more than five days; 8thly, the protractions, on the contrary, are not limited by any period; 9thly, in either case the causes of the accelerations and protractions are very appreciable in the greater number of instances.—*Journal de Loire*, in *Monthly Journal of Medical Science*, July, 1846.

ANECDOTES OF THE MEDICAL PROFESSION.

(*Continued from page* 196.)

IV. Our own times furnish me with a striking example of the deference paid to a physician by the highest potentates. When Dr. Jenner first promulgated the protective influence of vaccination against the danger of small-pox, the King of Spain fitted out an expedition

to carry the vaccine matter to every part of his transmarine dominions, and after having left the valuable material at the Canary Islands, the Caraccas, and all the provinces of South America, the director of the expedition resolved to carry the preservative to the remotest parts of Asia, and having stopped at Acapulco and the Philippine Islands, he introduced vaccination into China. The Emperor of Russia, too, after he had established the practice of vaccination throughout all his European dominions, sent Dr. Boutaltz to traverse his Asiatic possessions for the same benevolent purpose. The mission, therefore, when it had reached the capital of Siberia, proceeded to Ochotsk; from whence he sent it to Kamtschatka, and the islands situated between Asia and America. Fresh matter was transmitted also into China, so that the Spanish and Russian expeditions reached different points of the celestial empire nearly at the same time.

In the Island of Java, certain portions of land have been set apart for the support of vaccination, and as a mark of respect and veneration for the author of this valuable discovery, these lands have been designated, Jennerian lands.

This detail may be considered perhaps as affording evidence rather of the confidence of these Sovereigns in the merit of the new invaluable resource, than of their personal respect and deference to Dr. Jenner. But it is true that Bonaparte, in the plenitude of his power, accorded their freedom from bondage to no less than nine captives, severally, at the request of Dr. Jenner, a homage to the benevolent author of so important a discovery, and that the Emperor of Austria and the King of Spain, paid equal attention to Dr. Jenner's intercession in behalf of individuals who were detained in their dominions.—*Some Results of successful Practice of Physic, by Sir H. Halford. Essays*, p. 317.

V. There are few of our readers but must remember the melancholy impression, made on the public mind by the disastrous result of the expedition to the Niger, when this was made known in England through the newspapers. And none who remember this can forget that pathetic passage in the story, which represented the noble conduct of the surgeon, and the geologist of the expedition, when left alone in the far recesses of the Niger, amid their heroic companions, all stricken to death, or to death-like helplessness, by the fatal fever of the country. In this trying conjuncture, when the salvation of all on board depended on the speedy removal of the ship from her actual position, Dr. M'William took the navigation on himself, steering with his own hand, and piloting the vessel through all the intricacies of the river, while his companion worked the engine below. There is something very affecting, we had almost said sublime, in the picture thus presented to the imagination, of these two solitary men of science, assuming offices so foreign to their past habits and knowledge, stripped of all exterior cognizance of their class, standing as humble workmen at the helm and furnace, toiling by day, watching by night, while the force of the stream and the paddles was sweeping their ill-fated bark, freighted with their dying or dead companions, through the manifold dangers of their unknown course. The author of the volume before us was the clear-headed and stout-hearted pilot who did this, the undoubted preserver of the ship and her surviving crew, and the slight and simple way in which he speaks of his own exertions strikingly illustrates the old truth, that the brave man is ever modest. —*British and Foreign Medical Review*, vol. 16. p. 260.

VI. Sir Astley Cooper was kind enough to make us acquainted with his researches on the structure and functions of the thymus gland, with which he was then occupied; and I am the more pleased to recall this circumstance, because it enables me to record a reply of Sir Astley's, which proves delightfully the perfect truth and honesty with which he conducts his researches and experiments. While he was pointing out to us, on a most delicate preparation, the two membranes which he has found in what he calls the reservoirs of the thymus, I said to him, "You said, and it is." "No," he replied, "It is, and I said." The scientific character of the great English surgeon breathes in this response.—*Six Mois de Sejour en Angleterre par S. Pironde, D. M.—British and Foreign Medical Review*, vol. 8, p. 534.

VII.—When Dr. Dimsdale inoculated Catherine the Second for the small-pox, that Princess (who, whatever might be the vices of her moral character, possessed a very enlarged and magnanimous mind,) took precautions for securing his personal safety in case of her death. Finding herself much indisposed on a particular day, she sent for Dimsdale, whom she had already remunerated in a manner becoming so great a sovereign. "I experience," said she, "certain sensations which render me apprehensive for my life. My subjects would, I fear, hold you accountable for any accident that might befall me. I have therefore stationed a yacht in the Gulf of Finland, on board of which you will embark, as soon as I am no more, and whose commander, in consequence of my orders, will convey you out of all danger." This anecdote, so honourable to the Empress, I heard from one of Dimsdale's sons, above forty years ago.—*Sir N. W. Wraxall's Posthumous Memoirs of his own Times*, vol. 3, p. 199.

DR. SHEARMAN'S INTERPRETATION OF "THE MEDICAL REGISTRATION BILL."

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOUNAL.

SIR,

Dr. Shearman, of Rotherham, has taken upon himself the office of interpreter of the Registration Bill, for the benefit of your readers, and he professes to foresee, not only how it will "come out from the Committee," but also how it will "work" in practice.

Dr. Shearman may be more competent than the Council of the Institute, as a body, but his letter in the Journal of May 19th, instead of proving his superiority, appears to me to reproach and abuse them by his misrepresentations; for he says in his first four reasons, that "the intended legalization of medical

men, (not qualified for general practice according to the present law,) by the Council, and by Mr. Wakley's bill, are the same in effect;" whereas, Dr. Shearman knows as well as they do (because they have so often told him,) that the Council would legalize such medical men *in the first instance only*, to prevent retrospective legislation. The doctor's fifth "reason" is equally incorrect.

Dr. Shearman, moreover, informs your readers "what the profession have a wish to demand," but does not tell us how he acquired a greater stock of information on that point than that which the Council have collected. Dr. Shearman knows which class of disputants "think rightly" on the subject, and leaves us to presume physicians, inasmuch as "he is a physician," and "he thinks rightly.

"There is nothing like leather."

Taking the whole tenor of Dr. Shearman's letter, *I suppose* he means to say, "that in the nineteenth century, general practitioners, instead of advancing, should have a retrograde movement in acquiring their general and medical education, and in the extent of their efficiency for performing the duties which they undertake." I may therefore be allowed to ask Dr. Shearman, whether he writes for the benefit of the physicians, or for that of the public?

Remaining, Sir,

Yours very truly,

W. ALLISON.

East Retford, May, 1847.

Medical Intelligence.

MEDICAL APPOINTMENTS.

M. le Baron Pasquier has been appointed Surgeon to the King of the French, in the room of his father, the late Baron Pasquier, and M. Alphonse Pasquier succeeds as Surgeon in Ordinary.

The following gentlemen have been elected officers of the Royal College of Surgeons of Ireland, for the ensuing year:—President, J. W. Cusack, Esq.; Vice-President, Robert Harrison, Esq.; Secretary, Alex. Read, Esq. *Council*—Sir P. Crampton; Messrs R. Carmichael, Wilmot, Read, Auchinleck, Kerin, Jacob, Tagert, Beatty, Hargrave, Ellis, Williams, Armstrong, Trant, Rynd, Adams, Barker. W. Colles, and Power.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, June 4th, 1847:—R. D. Larke; H. Fisher; T. Thompson; J. P. Bowling; E. Davies; J. H. Perry; F. H. Ransom; C. Oakeley; W. Ellery; C. Irving.

Gentlemen admitted Members on Friday, June 11th, 1847:—E. Alsop; J. P. Berryman; J. H. Cook, S. O. Habershon; J. L. Oldham; C. Pates; P. C. W. Cooke; P. Eade; V. de Meric; J. Wilson; P. Brady.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, May 27, 1847:—Charles Sproull, Deasyhill; Edward Dawson Allinson; Wm. Henry Paine, Stroud; Henry Hides, Wisbeach; Alex. Mundell Champnes, Slough; Edwin Younge, Walesby; Francis Henry Blaxall, Claydon, Ipswich; Henry Heath Corbould, London; Henry Stevens; Thomas Hobson, Kinkella.

Thursday, June 3rd:—George Roper, Colby; Wm. Elleray, Bolton le Sands; Mark Hazelwood Clayton, Stratford-on-Avon; Robert Higginson, Yorkshire; John Bourne, Barnard Castle; Charles Wankford Currie, Bungay; Wm. Denton Dibb, Hull; Robert Muriel, Ely; Squire Sprigg, Bury St. Edmunds; George Housman Macnamara, Uxbridge; Henry Slade, R.N.; George Bruce, London.

OBITUARY.

Died, May 21st, at Ballinrobe, of typhus fever, John Roycroft, M.D.

May 22nd, aged 67, at Boulogne sur Mer, Dougal Campbell, M.D., Surgeon on half-pay of the Royal Artillery. Dr. Campbell was a claimant of the Earldoms of Annandale and Hartfell.

June 2nd, at Warrington, of fever, Wm. Morley, Esq., resident Surgeon to the Warrington Dispensary.

June 11th, at Liverpool, of typhus fever, John Whitley, Esq., Surgeon to one of the Union Districts.

BOOKS RECEIVED.

A Treatise on the Structure, Diseases, and Injuries of the Blood-Vessels, &c. Being the Essay to which the Jacksonian Prize for the year 1844 was awarded by the College of Surgeons of England. By Edwards Crisp, M.R.C.S., &c. &c. London: Churchill. 1847. 8vo. pp. 354. Plates.

Practical Observations on the Pathology and Treatment of Certain Diseases of the Skin, generally pronounced intractable, &c. By Thomas Hunt, M.R.C.S. L.S.A., &c. London: Churchill. 1847. 8vo. pp. 156.

Observations on the Treatment of Lateral Curvature of the Spine, &c. By Edward F. Lonsdale, F.R.C.S., Assistant Surgeon to the Royal Orthopœdic Hospital, &c. &c. London: Churchill. 1847. 8vo. pp. 116. Wood-cuts.

Hydropathy and Homœpathy impartially appreciated, &c. By Edwin Lee, Esq., &c. &c. Third edition. London: Churchill. 1847. pp. 139.

The Medical Reform Question, a Supplement to Remarks on Medical Organization and Reform. By Edwin Lee, Fellow of the Royal Medico-Chirurgical Society, &c. &c. London. Churchill: 1847. 8vo. pp. 34.

Table of Urinary Deposits, with their Tests, for Clinical Examination. By Ray Charles Golding, M.D. London: Renshaw.

The Microscopic Anatomy of the Human Body, in Health and Disease, &c. By Arthur Hill Hassall, F.L.S., M.R.C.S., &c. Part IX. London: Highley. 1847.

A Treatise on Diet and Regimen. By William Henry Robertson, M.D., Physician to the Buxton Bath Charity. Fourth edition. Part II. London: Churchill. 1847.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

COUNCIL PRIZE.

The Committee appointed at Norwich for the management of the Council Fund for the present year beg to announce that THE COUNCIL PRIZE of £50 will be given for the best Report "On the Cerebral Affections of Infancy."

The prize is open to general competition; the papers to be sent in to the Secretary of the Committee, Dr. Streeten, Worcester, on or before the 31st of May, 1848, each paper to have a motto affixed, and to be accompanied by a sealed envelope, bearing the same motto, and inclosing the name of the author.

NOTICE TO MEMBERS.

Gentlemen who have not yet paid their subscriptions for the current year, or who are in arrears, are requested to forward the amount due, either to the Secretary of the District in which they reside, or to the Treasurer or Secretary of the Association.

ROBERT J. N. STREETEN, Secretary.

BATH PATHOLOGICAL SOCIETY.

At the last meeting of this Society, held June 7th, it was resolved that the Society should adjourn until the first Monday in October.

ERRATUM.

At page 209, col. 1, line 13 from the top, for "the right pair being injured," read "the eighth pair, &c."

METEOROLOGICAL JOURNALS FOR APRIL, 1847.

Kept at Sidmouth, by W. H. CULLEN, M.D.; at Honiton, by Mr. ROGERS; at Romsey, Hants by FRANCIS BUCKELL, Esq., Surgeon.

	SIDMOUTH.		HONITON.		ROMSEY.
Mean of External Thermometer at 9 A.M.	47.69	.....	44.0	.....	47.26
. . . . . 9 P.M.	44.33	at 8 P.M.	43.0	at 9 P.M.	42.79
. . . the Maxima, ...	52.13	.....	51.0	.....	54.59
. . . . Minima, ...	40.48	.....	38.0	.....	37.66
Absolute Mean	44.75	.....	47.0	.....	46.12
. . . . . of ten preceding years.	47.80	.....	.	.....	.
Extreme highest on the 3th	59.	on the 24th	58.0	on the 21st	63.00
. . lowest . . 2nd	30.50	on the 2nd	28.0	on the 17th	28.20
. . range	28.50	.....	30.0	.....	34.80
Mean daily range	11.41	.....	13.	.....	16.90
Greatest daily range	.	.....	.	on the 21st	34.00
Least	.	.....	.	on the 13th	5.50
Highest . . mean	.	.....	.	on the 27th	54.25
Lowest	.	.....	.	on the 2nd	36.50
Mean Dewpoint, at 9 A.M.	43.50	.....	.	.....	39.50
. . . . . at 9 P.M.	39.70	.....	.	.....	39.85
Mean of Barometer at 9 A.M.	29.939	.....	29.31	.....	29.297
. . . . . 9 P.M.	29.615	at 8 P.M.	29.34	at 9 P.M.	29.288
Extreme highest on the 22nd	30.220	on 16th & 23rd	29.57	on the 16th	29.570*
. . . lowest on the 28th	29.724	on the 2nd	28.57	on the 2nd	28.830
. . . range	.496	.....	1.00	.....	.740
Number of days fine	12	.....	7	.....	11
. . . . . on which any rain fell .	14	.....	23	.....	18
. . . . . with snow or hail . .	4	.....	.	.....	1
Quantity of rain in inches	1.37	.....	.	.....	1.285
Thunder and lightening on the 23rd and 30th					
Prevailing Winds, ...	NW	.....	W. NW.	.....	SW. NW.

* In the Meteorological Journal for March, (p. 280,) Extreme highest of the barometer at Romsey—for 29.010, read 30.010.

TO CORRESPONDENTS.

Communications have been received from Mr. W. H. Duff; Dr. Kennion; Mr. C. K. Prince; Mr. G. M. Davis; Mr. Crosse; Dr. Cullen; Mr. D. Chalmers; Mr. S. Lowe; Dr. W. Davies.

T. L.—The letter cannot be inserted unless the author will allow his name to be attached.

The Petition of the National Institute of Medicine, Surgery, and Midwifery is unavoidably postponed until the next number.

The Report of the General Medical Annuity Fund was received too late for insertion.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON CLINICAL MEDICINE.

By W. R. Basham, M.D., Physician to the Westminster Hospital.

Lecture XI.

Acute Rheumatism, with metastasis to the Heart.—Pericardial and endocardial disease; general character of the physical signs; affections of the mitral valve distinguished from those of the aortic.—Progress of the case; the treatment; sudden death.—Post-mortem *examination.—Pathological conditions calculated to have brought about abrupt dissolution.—Treatment, when commenced after cardiac disease fully formed, less effective than when applied in the earliest stage.—Necessity for constant vigilance for heart-disease in acute rheumatism.*

Gentlemen,—The subject to which I am anxious to direct your attention to day is one of powerful interest in a pathological view,—pericarditis and endocarditis accompanying acute rheumatism,—the ravages of inflammation attacking the heart externally and internally. You have just left the *post-mortem* examination, and have witnessed the destructive effects of endocardial and exocardial inflammation. We will first examine the more prominent symptoms during life from the ward book, that you may the better understand the auscultatory signs of these destructive ravages; now that you can compare the cardiac disorganization with the altered murmurs you heard during life, you will also the better comprehend the fatal progress of such cases, and the principles that should guide you in their treatment.

E. S———, a girl of 14, form well developed, rich auburn hair, and of wax-like complexion, was admitted on February 17th, having been suffering from acute rheumatism in all the principal joints for the last seven days. On the second day after the joints were attacked she suffered acute pain in the præcordia, with fluttering sensation, and feelings of suffocation, short dry cough, and hurried respiration. These symptoms are stated to have daily become aggravated till admission. There was synovial effusion in both knee-joints, with great tenderness on pressure, and acute pain on motion; the knuckles of both hands were red, tumid, hot, and painful; the skin was of a feverish heat; the external surface extremely pallid, even exsangueous looking; the bowels had been freely purged; the countenance was anxious; the pulse 140, soft and full, no hardness; the heart's impulse was much augmented, tumultuous; great tenderness at the præcordia, shrinking from the slightest pressure; the heart's sounds were muffled, and there was general præcordial dulness; there was a prolonged systolic murmur heard most distinctly at the apex of the heart, diminishing towards its base, and scarcely heard at the upper part of the sternum. These auscultatory murmurs were sufficiently intelligible to declare that the progress of inflammatory action had already affected the mitral valve, the prolonged murmur heard most distinctly at the apex of the heart accompanying the systole being distinctly referrible to a mechanical imperfection of the valve.

I have had occasion more than once during the present session to point out to you the means of distinguishing affections of the mitral, from similar conditions of the aortic, valves. An error in the organic integrity of either produces a murmur coincident with the systolic sound; but when the mitral valve is affected, this murmur is heard most distinctly towards the apex of the heart, and towards the left. When the aortic valves are the seat of disease, the murmur is heard chiefly over them, and at the base of the heart, and continues to be heard distinctly, even up into the carotids; and, with imperfection in the aortic valves, regurgitation would take place during the diastole, and the second sound would also be accompanied by a regurgitating murmur. In this case, at this period, we only had evidence of disease of the mitral valve within the heart. The increased impulse and tumultuous action indicated that the pericardium was involved, and that in all probability, from the extensive præcordial dulness, the sac of the pericardium was filled with fluid, or was probably adherent to the heart. As the cardiac affection had existed for five days before admission, the rubbing murmur, which is usually present when the pericardium is first affected, had disappeared, either from the sac becoming filled with fluid, or the two surfaces becoming united by exuded lymph.

There could be no mistake as to the disease we were here called on to heal: there was no difficulty in the diagnosis; the signs manifested to the ear were explicit enough; and had the case come under treatment at an earlier stage, much might doubtless have been done towards saving life. At first I had no reason to doubt, that severe as the symptoms were, they might be made to succumb to remedies. The further history of the case will illustrate the amount

of influence they exercised. The character of the pulse, soft, without any sensation of hardness or wiryness in it, together with the wax-like exsangueous aspect of the surface of the body, under any circumstances, would have forbidden venesection; and in the young, in acute rheumatism, I am very averse to bleeding from the arm. She was directed to be cupped to ten ounces, as near the region of the heart as possible; and that we might, if practicable, bring her quickly under the influence of mercury. Hydrarg. Chloridi, gr. iii., cum Pulv. Ipecac. Co., gr. v., were ordered every four hours, the bowels to be relieved with a purging draught in the morning, and she was ordered to be placed in a warm bath.

On the next day we found the symptoms materially relieved; the pain in the præcordium had disappeared; the impulse of the heart had much diminished, and its tumultuous action had subsided; the rheumatic inflammation in the hands and knees had also abated. The sounds of the heart were more distinct, and now, in addition to the systolic murmur heard the day before, there was one accompanying the second sound, and prolonged after it, and heard most distinctly just over the aorta, and still heard as the stethoscope was placed higher and higher towards the top of the sternum. Here was the ordinary evidence of disorganization of the aorta in addition to the mischief already noticed in the mitral valve. As the bowels were much relaxed and the pulse kept up, but still soft, two grains of calomel, half a grain of opium, and a quarter of a grain of the potassio-tartrate of antimony were given, in the form of pill, every four hours.

During the next two days she improved very much, the pulse going down to 100, and the heart's action continued quiet, with the same physical signs, yet without any indication of ptyalism. On the 22nd the symptoms became again aggravated, rheumatic pains recurring in all the limbs. The heart's impulse again much increased; dulness over the entire præcordial region and to a considerable extent around it; physical signs as before; respiration hurried, 40; breathing much oppressed at times; tongue red, inclined to become dry, moist at sides; urine clear; remedies continued. On the 24th, after having taken two grains of calomel every four hours for six days, faint signs of ptyalism presented themselves; the tongue became moister; the paroxysms of pain in the chest intermitted; the urine became loaded with lithates; the heart's action subsided, and she felt considerably relieved. The mercury was continued in smaller doses, and a blister was directed to be applied all over the præcordial region. On the 25th, the pulse rose rapidly, and with it an increase in the heart's impulse; a sharp paroxysm of pain in the region of the heart, with a recurrence of the opppressed breathing, indicated the necessity for a further topical bleeding. She was cupped from the side to eight ounces.

On the 26th, the report states that a great improvement took place after the last cupping; the pain had entirely subsided; she breathed quietly, 26 per minute; slept a little; heart's sounds appeared clearer, less muffled; but the other physical signs remained unchanged, and there was still the regurgitating murmur after the diastole. On the 28th, a very visible improvement is recorded,—no pains, no dyspnœa, can move freely in bed, and has had some refreshing sleep; tongue moist; pulse 96, soft; heart's impulse not increased; signs as before. The amount of ptyalism produced was yet faint, and it being most desirable to obtain the full effect of mercury, a grain of calomel and half a grain of opium were continued night and morning. On the 1st of March a recurrence of a paroxysm of pain in the region of the heart and an attack of almost suffocative dyspnœa, spoke intelligibly enough of the continuance of unsubdued inflammatory action, and as the calomel, so constantly administered, had failed to produce full salivation, mercurial inunction was about to be employed, but was counter-ordered on the second, as the gums manifested increased mercurial action. All the symptoms on this day underwent a palpable improvement; the pulse was quiet and soft; the tongue moist; the gums exhibited the puffiness and tenderness of salivation. On the morning of the third, she is reported to have passed a very good night, sleeping some hours; the pulse is stated as 90; respiration quiet; all external indications of rheumatic inflammation subsided; the tongue moist; countenance placid; and some craving for food. She sat up in bed at twelve at noon, and was eating her diet of rice pudding; she laid her plate down suddenly, inspired deeply and gaspingly two or three times, and expired.

So sudden a death after the aspects of improvement and hope which the last twenty-four hours had presented was remarkable. Let us see if the *post-mortem* examination will throw any light on the pathological cause of this unexpected dissolution.

Sectio cadaveris twenty-five hours after death.—The external aspect of the body presented the appearance of a wax model; no sanguineous gravitation or purpling of the dependent parts, but the whole surface pale white, almost of alabaster purity. The cavity of the chest presented no diseased conditions. The lungs were of a pale flesh tint; the grey mottling but faint; no pleuritic adhesions. The mucous membrane of the larynx and trachea was pale and healthy; some fine capillary injection of the bronchial tubes in the secondary sub-divisions becoming darker in the smaller tubes, with the presence of some frothy white mucus. The heart and pericardium were firmly glued together by an uniform layer of gelatinous lymph; the two, with some degree of force, were separated and detached. At the base of the heart this jelly-like exudation was deposited in much quantity. The heart was generally enlarged; the walls of the left ventricle firm, and its cavity completely empty; not a vestige of either fluid blood, or clot, could be found in it. The mitral valve was much disorganized; the edge or rim of the valve much thickened, studded with wart-like excrescences, forming an unyielding irregular patent ring, when viewed from the auricle; the left auricle contained a very small clot of blood. Two of the aortic valves were transparent and perfect, but one was pouched, and had an excrescence of lymph deposited on it; one isolated patch of white cartilaginous deposit was noticed in the aortic arch. The right auricle and

ventricle were healthy, but much distended by large coagula. The viscera of the abdomen were healthy; the brain presented no conditions of disease.

The first question you will naturally ask after witnessing this examination is, what is the pathological condition that can explain the remarkable suddenness of the death? Could the defective valvular structures be the cause of this instantaneous death? Not of themselves alone. Could the adhesion of the pericardium to the heart, with the large amount of lymph deposited at the base of the heart, produce instantaneous death? Certainly not; for quite as large an amount of endocardial and exocardial disorganization has been recorded in other cases, where the termination of the disease has been slow, tedious, lingering,—dropsical accumulations or pulmonary congestions at length putting an end to the patient's sufferings. Could the endocardial and exocardial conditions conjointly bring about this abrupt decease? I think they could; and the emptiness of the left ventricle conveys a hint how this *death-stroke* may have been produced conjointly by these morbid causes. To comprehend the full force of these conditions, we must not overlook the effect of pericardial disease upon the heart's movements,—that in pericarditis the heart's action becomes irregular,—its impulse increased,—its motions tumultuous; in fine, that when lymph becomes deposited about the heart, its actions become embarrassed, irritable, and unsteady. With a heart adhering to the pericardium, and surrounded by recently exuded lymph, can we wonder that so sensitive an organ should become irritated and uncertain in its motions. Do not forget this consequence of exocardial disease, especially when recent.

Now, let us turn to the internal condition of the heart. The disorganization of the mitral valve proved, beyond all doubt, that regurgitation to a vast extent must have taken place during the systole. The dyspnœa and hurried respiration declare this as well as the physical signs. Bear in mind the action of the ventricle and valve in a sound heart. The left ventricle contracts on the continued blood which is propelled forward through the aorta, the perfect mitral valve preventing any blood returning backwards into the auricle. During the systole the auricle is filling with blood, coming from the lungs, and the succeeding diastole of the ventricle receives the blood from the auricle, which is again propelled forward as before. But with an imperfect mitral valve, the ventricular contraction sends some blood forward through the aortic canal, but a portion is driven backwards through the imperfect auriculo-ventricular valve into the auricle; the current of blood in the pulmonary veins coming from the lungs is thus retarded, and this obstruction causes pulmonary congestion, cough, and suffocative dyspnœa. Now, in a heart, the movements of which are embarrassed, as this heart has been shown to have been, by pericardial adhesions and deposits of lymph, and where action was known at times to have been unsteady, tumultuous, and irritable, this faulty condition of the mitral valve, co-operating with unsteady and irritable action, might, it is conceived, have produced a fatal condition in the following manner:—A few beats, of increased impulse and power, accompanied by suffocative or pulmonary oppression, are followed by a beat of unsteady force; then the ventricle contracts again with spasmodic energy, drives the blood partially forward, partially backward, regurgitatingly, into, even beyond, the auricle, the backward impulse being felt even in the mouths of the pulmonary veins; so that at the ventricular diastole, the auricle empty, or nearly so, the ventricle receives nothing to stimulate its contractile action, and the whole heart fluttering, and embarrassed, and perturbed by surrounding and external hindrances, as well as by this new internal deficiency of its vital stimulus, and the right side, overloaded by blood accumulating there, unable to move forward from the obstructed state of the pulmonary circulation, the ventricle collapses upon a void, the life-current is arrested, and the patient instantly expires. Such is the brief category of conditions that are believed immediately to have led to dissolution.

This poor girl's case illustrates most forcibly the irresistible progress of inflammation of the heart, when it has proceeded untreated or unchecked for a certain time. I believe that had this case come under treatment twenty-four or even forty-eight hours after the first symptoms of acute rheumatism had developed themselves, in all probability her life might have been spared. Had she been in the hospital thus early, we should have been on the constant watch for cardiac mischief, and ready to combat it the moment it declared itself in the faintest degree, for it is one of the characteristics and advantages of modern practice, that by the aid of the stethoscope, the earliest possible symptom of metastasis to the heart, may, by a watchful ear, be detected. In such cases you must not wait for pain in the chest, or palpitation, or uneasiness in the præcordia, or other complaint from the patient. In every case of acute rheumatism you should never omit to apply the stethoscope at every visit to the region of the heart; be always on the watch for cardiac mischief, the accustomed and educated ear will instantly detect the faintest rubbing murmur or other indication of metastatic inflammation, and will be as quickly ready to combat this fearful enemy to the ultimate safety of the patient. I have every reason to think that all the heart-mischief was perpetrated before the patient was admitted. The physical signs underwent no change, except a partial mitigation, during the time she lived and was under observation. Once or twice there was a decided amelioration of the heart-symptoms; the cupping relieved her, and the aggravated action of the heart was for a time brought down; the opium allayed the constitutional irritability, and assuaged the rheumatic fever; but our chief ally was comparatively inoperative. Faint indications of salivation could with difficulty be obtained, and this, notwithstanding the large quantity of calomel employed. It is nevertheless, instructive to remark, how palpably relieved all the cardiac symptoms instantly became, so soon as the faintest trace of the constitutional operation of mercury was developed; but the full effect of this mineral could not be produced, and the beneficial change could not be sustained. The pathological conpition was more powerful than the mercury could

overcome. Such cases will occur to baffle the best-suggested and most active treatment of our art; but such cases ought not to dishearten us, for they teach us valuable lessons both in pathology and therapeutics; they demonstrate the morbid changes of structure that disease establishes, and they illustrate and develope the principles upon which such cases are to be successfully treated.

The peculiar delicacy and wax-like character of the complexion of this poor girl have already been noticed. It may seem a trifling matter to remark upon, but her general aspect was so illustrative of the old doctrine of the temperament, that I cannot forbear alluding to it. She possessed all the external characteristics of the so-called sanguine temperament, and to which especial susceptibility to acute inflammatory disease was attached. Light flowing auburn hair, fair and alabaster-like complexion, florid cheeks, a symmetrical form, full and early developed, with a mind vivacious and intelligent, and her disease the very concentration of inflammatory intensity. Without meaning to revive or discuss the obsolete question of the temperament, you may, nevertheles, remark, and be prepared to find, that among the youthful who present such characteristics as have been here described, there is a remarkable tendency, and almost special proneness, to acute inflammatory disease; and that when such subjects are attacked by inflammation, it is intense in its degree, often unmanageable, and speedily tends to a fatal termination.

THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(*Fourth Series of Experimental Researches.*)

By William Addison, M.D., F.R.S., Malvern.

(*Continued from page* 315.)

XIV. Inflammation considered Morphologically.

Before proceeding to substantiate the truth of these conclusions by a microscopical demonstration of the visible changes produced by inflammation, I shall remark upon certain questions which are considered doubtful with respect to the process of nutrition. According to physiologists generally, the lymph, or as I have termed it, the protoplasma of blood, is of the nature of a cyto-blastema, exuding through the interstices of the walls of the nutrient or capillary vessels, somewhat like water through a sieve, and giving origin to cells after its exudation; and upon this hypothesis they explain the origin of pus-cells.

Vogel even attributes a developmental capacity,—i.e., a metamorphic power, not only to coagulable, but to coagulated lymph. The fibrinous fluid of a dropsy, he says, is capable of organization, and "it is indifferent whether the fibrin is in a fluid or coagulated state, as in either case it acts equally well as a cyto-blastema, and its capacity is unlimited." "There may be evolved from the fibrin," he goes on to say, and he is speaking of fibrinous dropsy, "the most different forms of tissue, either normal, as cellular tissue, simple muscular fibre, cartilage, bone, vessel, nervous fibre; or pathological, as pus, granular cells, cancer, tubercle, concretions, &c."*

Speaking of the formation of pus, he says,† "the formation of pus is dependent on two very distinct circumstances. In the first place a fluid *must* be secreted or separated, to act as as a cyto-blastema; and, secondly, the pus-corpuscles *must* be formed in and from this cyto-blastema, which is always the fibrinous fluid, which has already been described in our observations on fibrinous dropsy, *consequently* the formation of pus *must* invariably be preceded by the exudation of a modified blood-plasma." ‡

Again, in another place, "The fibrin may coagulate, and thus give rise to false hydatids, apparent serous dropsy, induration of the affected organ, &c. Then follow the great number of changes which arise from the further development of the fibrin,—suppuration in the widest sense of the word, with all its modifications and forms, the formation of granular cells, and ulceration, epigenesis 'neubildungen' of the most varying kind, tumours, hypertrophies, concretions, changes of colour, softening, induration, &c."§

Dr. J. H. Bennett adopts, if he may not be considered the author of, the views and sentiments expressed by Vogel. "The term exudation," he says, "has been introduced into pathology not only to express the act of the liquor sanguinis (or lymph) passing through the vascular walls, but the fibrinous portion of the liquor sanguinis itself when it has coagulated."

"In every case the exudation constitutes a blastema for the growth of nucleated corpuscles, which differ in form, size, constitution, and power of further development. The various kinds of development of the exudation may be grouped under the following heads"; and here follow sixteen different forms, normal and abnormal, amongst which are enumerated "pus-cells," "carcinoma," "muscular tissue" "epidermis and epithelium." ‖

I have carefully perused Dr. Bennett's original treatise, and Vogel's *Pathological Anatomy*; and I can find in them no proof whatever that coagulated fibrin acts as a cyto-blastema,—no demonstration of its evolving muscular fibres, nervous fibres, granular cells, or pus. Vogel indeed, states that these things are shewn in numerous parts of his work, and advances this as a special reason for

* "Pathological Anatomy," p. 55.—Ed. 1847.

† *Loc. cit*, p. 144.

‡ The italics in the above quoted passage are mine, and inserted to fix the reader's attention upon the kind of demonstration on which the "unlimited" formation of cells in coagulated fibrin is based.

§ *Loc. cit.*, p. 415.

‖ *Monthly Journal of Medical Science*, Jan. and Feb., 1847.

its being unnecessary to enter upon any refutation of the contrary doctrine which I maintain.* But I contend that these things are not shown,—that his book opens with, and is altogether based upon, a broad assumption with respect to exudation, and an unlimited cytogenesis in coagulated fibrin, for which there is no where in it, that I can find, a shadow of proof offered.

Admitting it very possible,—nay, probable, that portions of the lymph or protoplasma of blood may exude through the walls of the capillary vessels, and fibrillate, or form, as Dr. Bennett states, "a coating of granular matter on their exterior," what proof have we that either the granules or the fibres, or any other element of the exudation, acts in an unlimited manner as a cyto-blastema for all kinds of cells, muscular fibre, pus, and epithelium? None whatever; nor is there any indication of a natural order or law in such an interpretation; for coagulated fibrin can be hypothetically made to produce just what the pathologist may happen to find by an assumed "unlimited" cyto-genesis, while the fact of an increased amount of colourless blood-cells becoming stationary upon the walls of the vessels of irritated textures, is made to appear anomalous and unnecessary. It is true Dr. Bennett states that he has long doubted the truth of the asserted fact of the colourless cells of blood accumulating in unusual numbers in irritated vessels, and that he thinks "the observers who have stated these circumstances to have occurred, have mistaken the nuclei of the epidermic cells in the web of the frog's foot for these structures." The "*Narative of Experiments*," published at the end of the third series of my *Experimental Researches*, nay, the short extracts quoted by Dr. Bennett† himself, prove conclusively that the mistake he supposes did not occur either to Dr. Williams or myself. The question Dr. Bennett here raises is simply one of fact, and as such I leave it to be determined by future observers, making, however, this remark, that Dr. Williams mentions Mr. Toynbee as having drawn his attention to the phenomenon.

But, to return,—the metamorphosis of lymph may be watched in progress in the lymph of newly drawn blood, and fibres are seen forming in it so abundantly as to render the materials coherent and solid, but there are no appearances indicating a cell-genesis; and it is contrary to all analogy to assume that the same fluid matter can form indifferently either cells or fibres. In the lymph of newly-drawn blood, and in recent healthy pus, we see with the microscope multitudes of well-formed cells, and free molecules and granules, similar to those seen within the cells, but we do not see a corresponding number of transitional forms or young cells, nor has any evidence been afforded to show that the molecules or granules are cell-germs.

Again, a great deal has been asserted respecting, and many important functions have been attributed to, certain particles seen in the interior of cells, termed *nuclei*; but the fact that similar particles may be produced by chemical re-agents, and may be seen forming in consequence of their application, by the corrugation of the interior contents of the cells has been neglected. Nothing has been more common during my researches, than for me to see in pus, in mucus, and in lymph, corpuscles, or cells, filled with active molecules, uniformly distributed throughout the cell, and to observe, on the application of a dilute acid or other extraneous matter, the molecular material shrink up into two or three small rounded or oval particles, leaving the space between them and the cell-wall clear and perfectly transparent.* It can scarcely be supposed that such particles or spurious nuclei when set free by the subsequent rupture or dissolution of the cell-wall, possess the property of a cell-genesis, and microscopical observers have given no discriminating rule by which to distinguish the chemically-formed and inert nuclei from those natural ones to which they attribute such varied functions. It is upon these grounds I adhere to the conclusion *that the colourless cells of lymph and pus are unmetamorphosed blood-cells.* Divested of its technicalities the inquiry is simply whether the colourless cells so abundantly excreted by healing and ulcerating, or inflamed and suppurating textures, are non-metamorphosing colourless blood-cells, or whether they are the molecules, granules, or nuclei of the exudation grown into cells. The exudative theory answers the latter alternative of the question in the affirmative, and assumes a cito-genesis in lymph and coagulated fibrin.

The advocates for this theory concede that coagulated fibrin, to be the subject of a cell-multiplication or suppuration, so as to discharge or excrete an abundance of pus cells, must become vascular—be permeated by currents of blood. Now, as blood contains abundantly colourless cells, which may be seen withdrawn from the red circulating current, and become stationary in the protoplasma space, so the weight of evidence is therefore, I conceive, in favour of my conclusion.

Finally, it appears to me from my investigations, that the law or order of Nature is, universally in all living structures, that incoherent cells precede the coherent, cellular, and fibrous textures. Therefore for fibres, fibrous textures, fibrin in solution, or fibrin coagulated, to act as a cyto-blastema and be metamorphosed *backward* into cells, would be an anomaly or exception to be adopted only upon proof.

The fibrinous and all the other constituents of the

* *Loc. cit*, p. 287.
† *Loc. cit.*

* See the Experiments, p. 12, *Second Series of Researches*, and observations thereon, pp. 20 to 23.

interior matter of blood-cells contribute to the elaborating function of the cell, and to the sum of the product which the cell may ultimately deliver up, whether new cells, a fibrillating matter, or a fluid secretion; but that coagulated fibrine, or any of the molecules, particles, or nuclei, inclosed among the fibres, are capable of again becoming elaborating cells, multiplying cellular forms, and giving rise to suppuration "in the widest sense of the word," is a question much too important to be concluded by inferences opposed to general laws. To be adopted it ought to be proved demonstratively. But, let it be granted, or let us assume, that cells of sundry kinds, muscular fibres, and epithelium, do spring from "an unlimited cytogenesis" in coagulable or coagulated fibrin or lymph, and the application of the law and doctrines of morphology to the phenomena of inflammation and scrofulous diseases is not thereby affected; for, if, as occurs in inflammation, the normal elements of an osseous, cartilaginous, or fibrous texture, be permeated by an increased number of blood-currents, and fettered or hindered in their function by an unwonted accumulation of abnormal cells and protoplasma, the metamorphosis is irregular; and if, in the manner granted, these textures become transformed, as they do in scrofulous diseases, into red and vascular textures, copiously excreting the cellular forms, denominated pus, the metamorphosis is retrograde.

The following case will, I think, put the matter in a clear and intelligible point of view, and furnish rational grounds of distinction between inflammation and scrofulous disease.

(To be continued.)

CASE OF TRAUMATIC TETANUS: INHALATION OF ÆTHER.

By David Chalmers, Esq., Surgeon to the North Dispensary, Liverpool.

On Friday, the 23rd of April, I met Mr. Owen in consultation on a case of tetanus. The patient was a strong, muscular, young man, named ——— Nolan, aged 20, a brickmaker.

Mr. Owen first saw the case on Saturday, the 17th, and found the patient then complaining of stiffness of neck and difficulty of swallowing. A few ounces of blood were taken from his arm at his mother's urgent request, and five grains of calomel, to be followed by a black draught in the morning, prescribed.

On Monday, the 19th, he was reported by his mother as nearly well; but on Wednesday, the 2Ist, Mr. Owen was again sent for at 11 o'clock at night, and found him labourinng under all the well-marked symptoms of tetanus. Pulse 110; abdomen very hard. Sixty drops of laudanum were prescribed, and fifty drops more to be given during the night. On Thursday, 8, a.m., Mr. Owen found him better, he had slept well during the night; the spasms were not so severe; perspiration profuse; limbs rigid; pulse 98. He was ordered forty drops of laudanum. At six, p.m., he was still easier; the perspiration and countenance natural; bowels open; motions dark, and offensive. Fifty drops of laudanum were directed.

Friday 23rd, 11 o'clock, a.m., (the first time I saw him.) Complains of having had a very bad night; severe trismus; difficulty of swallowing; violent spasms of the muscles of the neck, chest, abdomen, and limbs, with constipation and profuse perspirations; head much drawn back; great toes strongly drawn towards the soles of the feet; body very rigid, and spasms occurring about every half minute; pulse 105. He states that about six weeks since, as nearly as he can recolleet, in raising some bars of iron, he injured the last phalanx of the middle finger of the right hand. The wound is now all but healed. Nail loose, so that in handling it it came away in my hand.

R. Calomel., Pil. Opii, utrq., gr. j. Fiat pilula omni hora sumenda.

3, p.m. Expresses himself as easier; has had some sleep. We administered the sulphuric æther for three or four minutes at a time, repeating it at short intervals. Under its influence the patient became quiet and tranquil; breathing natural, with diminution both in frequency and strength of spasms, and with a disposition to sleep. Continue the pills.

6, p.m. Has slept ever since, and the spasms nearly as frequent, still they do not entirely rouse him. Perspirations still profuse; æther repeated with the same effect. Continue the pills.

9, p.m. The same. We repeated the æther with the effect of reducing the tension of the muscles generally, those of the chest and abdomen especially. Marked diminution of strength and frequency of spasms; perspiration not so profuse; pulse 104, reduced by the æther to 98, this was probably owing altogether to the relief from the spasms; bowels constipated.

R. Ol. Ricini, et Ol. Terebenth, utrq., oz. j., in forma enematis. Pills every second hour.

24th, 9 a.m. A tolerable night; spasms still frequent but not severe; muscles of chest less affected than those of the abdomen or limbs. Repeat the æther. Bowels not moved.

R. Ol. Ricini, oz. j.; Ol. Tiglii, gtt. j. M. Sumat statim.

12.m. Repeated the æther.

3 p.m. Æther repeated, bowels still constipated. R. Extr. Colocynth, Co., gr. iv.; Ol. Tiglii, gtt. j. M. in forma pilulæ; sumat j. quaque secunda hora.

9 p.m. Bowels freely opened after taking three pills; has had during the day much greater hardness and spasm of the abdomen, but is now altogether much relieved. Repeated the æther, and ordered cocoa and milk; hot gin and water freely. Continue the pills every second hour.

25th, 9 a.m. Spasms in abdomen and lower limbs very severe, forcing flatulence from the bowels with great noise; upper half of the body as before. Has eaten a bit of mutton chop. Repeated the æther.

9 p.m. Spasm has been more severe to-day in the abdomen, but not so frequent. Repeated the æther.

26th. Going on favourably, and from this date till the 4th of May, had the æther three times daily, and once daily till the 17th. Pills given every fourth hour. On the 26th æther discontinued. On the 8th of May began to walk, and on the 9th got down stairs. He is now able for work.

Owing to carelessness on the part of the patient's friends, he did not get so many pills as ordered; he had, however, about thirty, and his teeth were not affected.

The foregoing case differs from all other cases that I have met with, in having so many days threatened before it made its real attack The severity of the spasms, by being less marked on the chest than on the other parts of the body, afforded a better opportunity for the administration of the æther, at the same time that the great congestion of the lungs and head consequent on violent spasms of the chest was in great measure prevented. The marked influence of the æther on the spasms in their worst state, and the still more marked influence on the great rigidity of the muscles in the chronic state, prove it to be an agent of great power in spasmodic action of the muscles. Even three weeks after the invasion of the disease, the legs and thighs were so rigid as to require the exertion of all my power, added to the patient's own exertion, to flex them on the abdomen, but after having had the æther he flexed and extended them himself with facility.

In using the æther at first I was careful not to give it him in its strongest state, owing to its great effect on the already excited muscles of the throat, but afterwards he had it as strong as we could give it him, using hot water to increase the evaporation, and exhausting from one and a half to two ounces of the strongest æther at each administration. The spasms were always allayed by it, increasing during the interval, making him long for our re-visiting him; his only cry was that we did not give him enough of it.

This case, and one reported formerly from the North Dispensary, seem to me to be as convincing proofs of the efficacy of æther as any that have appeared.

The case I allude to was the reduction of a dislocation of the femur into the ischiatic notch, of five weeks' duration, less two days, and the patient, a powerful navigator, forty years of age. Two sets of pullies were applied to him with different fastenings to the thigh; the strain was kept up by one set, but the other set was also kept up so nearly to the same strain, that on the slightest slip of the principal pullies, the second set took their place. The strain was kept for one hour and a half, and during the whole of the time he was under the influence of the æther. It was about six weeks afterwards before he could walk freely.

June 10, Everton, Liverpool.

THREE CASES OF NON-MALIGNANT TUMOUR OF THE UTERUS, ACCOMPANIED BY THE USUAL SYMPTOMS OF CANCER OF THE UTERUS.

By E. J. Shearman, M.D., Rotherham, Member of the Royal College of Physicians.

(Read before the Sheffield Medical Society, March 4, 1847.)

In the *Dublin Medical Journal* for 1842, Dr. Montgomery says, "the disease of *cancer uteri* is too universally recognized as one of the most frightful scourges of humanity, to render it necessary for me to attempt any description of its horrors, or to impress on even the most junior of my hearers the importance of closely studying the phenomena of an affection, hitherto found so utterly intractable by every known means; and which, when once fully established, entails upon the unhappy sufferer, one unbroken train of miseries, from which it has been truly said, 'temporary relief can be found only in opium, and permanent rest only in the grave.' But I am perfectly convinced, from many years' observation, that something may be done, to stem, at its source, the torrent of agonies that will otherwise overwhelm the patient; nay, I firmly believe it may, in many instances, be altogether turned aside, and the victim be rescued from the sad fate impending over her."

Agreeing perfectly in this opinion, and having during the last twenty years of my practice met with many anomalous cases simulating cancer uteri, which, (until the late improvements in the diagnosis of such cases,) were allowed to run their uninterrupted course, I am induced to lay before the members of this Society the following cases, which have occurred in the last two years, and which I hope are not altogether uninteresting, as they have long been submitted to the tests of *sight*, *touch*, and *manual manipulation*,—methods, which until very lately, have not been fully made use of by medical practitioners for ascertaining such diseases.

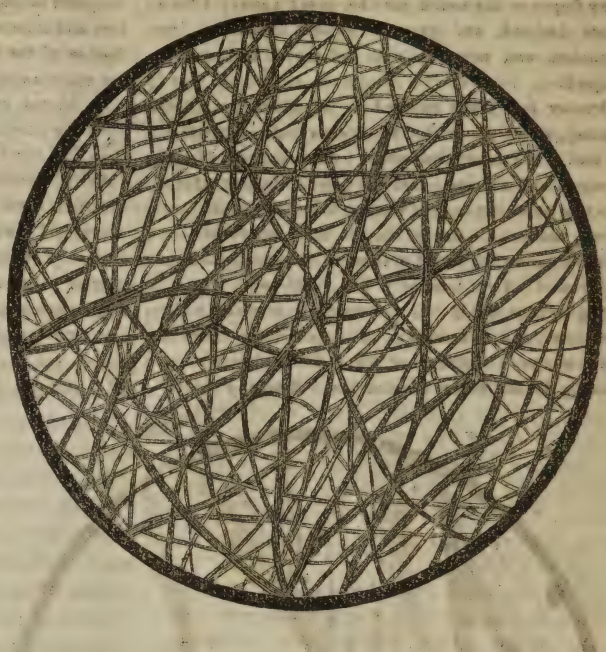
Case I.

A single lady, aged 48, consulted me in June, 1845, in order to obtain relief from the pains produced by what her medical attendant called "*cancer of the womb*." She gave me the following history of her disease:—Two years ago she was, and had been all her life, perfectly regular; she was menstruating at the time she received a very sudden and heart-rending shock by the sudden death of a valued friend; the catamenial discharge suddenly stopped, and never re-appeared in a healthy form. From that time to the present she has suffered from occasional sharp pains in the back and loins, traversing along the crest of the ilia and groins, often shooting down the front of the thighs; and this pain was attended with frequent discharges of sanious fluid, mixed with clotted blood, in various quantities. Latterly these pains have taken on a *periodical type* and increased in violence, commencing about seven

o'clock at night and continuing till five or six o'clock the following morning, *when she became perfectly easy*. Her nights were wretched; her appetite bad; muscles emaciated; and that peculiar discolouration of skin, and painful and anxious expression of the face so commonly found in scirrhus uteri was very remarkable in this lady. She had no leucorrhœal discharge, but the bladder and rectum were irritated and difficult to manage. I could only succeed in introducing (and that with the greatest difficulty—the hymen being unruptured) Salmon's speculum ani into the vagina, but I managed, with the aid of a good lamp, to clearly ascertain the *absence* of the least *increase of size, form, or density of the cervix uteri*, and the *os uteri was quite normal*. I assured her she was not suffering from cancer, prescribed acetate of morphia, iodine, and iron, which soon relieved her acute sufferings, and she returned home to her friends at some distance.

In July, 1846, I was sent for to see her at her residence, and there met her two medical attendants, who had succeeded in convincing her she was labouring under *cancer of the womb*, and that she had not long to live. She was greatly emaciated, constantly bleeding from the uterus, her nocturnal pains had become intolerable, and she told me her life was a burden to her. I succeeded in dilating the vagina with a sponge tent, introduced with great difficulty Simpson's Speculum Vaginæ, and through that his uterine sound, five inches and a half into the uterus, which I examined from the abdomen in front and through the rectum behind, and found perfectly moveable. A deluge of blood followed this examination, but I was quite satisfied *the neck and mouth of the uterus were not diseased. I assured her she had no cancer;* but that her disease consisted of a tumour of some kind *in* the uterus. I gradually dilated the vagina and os uteri by means of sponge tents and Simpson's uterine dilators, until I could see and feel the tumour in the uterus. I then introduced the uterine sound, passed it all round the uterus to ascertain the nature of the tumour, and during that operation I accidentally detached the tumour from the lining membrane, and it came away with considerable hæmorrhage, in one piece, weighing four ounces. The hæmorrhage ceased under the influence of ergot; the nocturnal periodical pains became very much diminished, and I was in great hope my patient would get well; but in the course of a few weeks the old periodical pains and discharge returned; and on a fresh examination with the speculum and uterine sound, I discovered a new growth of tumour.

I am sorry I cannot shew this tumour, I sent it up to Professor Simpson, of Edinburgh, for the purpose of obtaining his opinion respecting the case, and he still retains it. The drawing, No. I., obligingly made by my friend Dr. Branson, shews very accurately a microscopic view of a portion of it magnified 250 diameters, which proves it to belong to the class of *fibrous tumours*.



There being no pedicle to this tumour, I could not expect to detach it again advantageously; I therefore determined to try the effect of iodine internally and externally, in the form of tincture, balls, and injections, assisted by quinine and iron, and acetate of morphia, to relieve the pain. I have pursued this plan for four months; the result is she has less uneasiness of every description; her nights are good; her appetite, strength, and flesh have improved; and the tumour, as ascertained by the uterine sound, has decreased in size an inch and a half; *the os and cervix uteri remain perfectly normal*. She is now quite convinced that her disease is *not cancer*, and lives in hope that she may eventually be quite cured.

Case II.

A delicate hysterical female, aged 35, married five years without ever having been pregnant, was attacked soon after marriage with severe burning, agonizing, and lancinating pains, referred to the neck of the womb, and extending from pubis to sacrum, thence down the thighs. These pains came on *periodically every night* about ten o'clock, and increased in intensity until about six in the morning. *She was quite free from pain during the day*. The pain on coition was excruciating. She had very frequent hæmorrhage, and when this ceased, a sanious kind of matter, mixed with a fluid resembling pus in appearance, kept her constantly wet and uncomfortable; added to which the bladder and rectum were very irritable.

When she consulted me, in July, 1846, for what she

had been led to believe was cancer, she was emaciated, had a greenish sallow complexion, with that peculiar appearance in the countenance indicating malignant disease. I examined the uterus by means of the speculum, found the os healthy, but the cervix elongated and rather narrow; the least touch with either my finger or the sound gave her great agony; I therefore desisted, and gave a cautious opinion. Iron, quinine, and morphia, with astringent and sedative injections, relieved the symptoms so much, that in October last I was enabled to introduce the uterine sound, which penetrated the uterus to three inches and a half, and I easily discovered by examination from the rectum and abdomen that the uterus was not attached to any other organ, but was, at its fundus, much larger than natural. I dilated the os uteri with Simpson's dilator, and then found a tumour apparently attached all round. I got hold of a bit of this with a pair of long forceps, cut it off, macerated it in spirit of turpentine, and examined a thin slice of it under the microscope, a specimen of which Dr. Branson has also kindly delineated for examination. (Drawing No. II.)

Finding this also was a fibrous substance of the same description as the first case, I resolved to let it alone, and try the effect of iodine internally and externally, by means of introducing the tincture into the uterus, injections, and balls. The result is, that by these means, aided by tonics and the cold shower-bath, the tumour has almost if not quite disappeared, and with it the whole of the distressing symptoms which were so similar to cancer as to have induced more than one practitioner of eminence to call the disease by that name.

CASE III.

This case has been related to me by my friend Dr. Toogood, of Torquay, which I will give in his own words.

"A lady, aged 63, laboured under some obscure symptoms for more than two years, which induced her medical attendant to believe that she had some disease of the bladder. One day she was seized with sudden and profuse discharge of blood from the vagina, accompanied with sharp uterine pains, like those of incipient labour or miscarriage. I was then called to her, and informed by her surgeon that she had some disease of the womb, which he believed to be *scirrhus*. On examination I discovered that the os uteri was a little dilated, and very thin, with something protruding from the uterus, the nature of which could not at that time be correctly ascertained. She had long been suffering periodical pains in the region of the pelvis. I directed some ergot of rye, and on the following morning I found that the tumour had descended much lower. I passed Simpson's sound into the uterus, and carried it quite around it twice. Two hours after a large fibrous tumour came away, without pain, and the hæmorrhage ceased; it was larger than a common-sized kidney, with an attachment about the size of a shilling, and it appeared to come away clearly and entirely. All the former symptoms disappeared, and she rapidly improved. This amendment, however, did not last long; for about a month afterwards, *periodical pains* re-appeared about the region of the uterus, and some discharge. A most careful examination failed to detect any cause for these symptoms, which, although occasionally relieved, never subsided for any length of time. It is now more than three months since the tumour was removed; the pains are more severe, and generally occur every afternoon or evening, and resemble those of cancer in its early stage; the discharge, too, is more profuse and bloody, so that its effects are visible in the countenance and constitution. Her sleep and appetite are becoming impaired. I have repeatedly examined her with great care, but can detect nothing more than an enlarged, painful, and indurated state of the uterus, but I *do not* find any *ulceration*, or even *thickening*, of *the neck*. Thinking there might be another growth, I dilated the os uteri with sponge tent, and examined that organ internally, without discovering any cause for the symptoms. She is generally free from pain until towards evening, when dreadful pain comes on. At first this did not happen every evening, but now she scarcely passes a day without much pain."

The only tumours growing from the internal membrane of the uterus described by authors, are soft and hard polypi, encephaloid, cauliflower excrescence, hæmatoma, scirrhus, and fibrous; the latter often running into osseous and calcareous tumours. The symptoms and progress of these diseases are quite different from those I have described; and I have

consulted the works of Dr. Montgomery, Dr. Davis, Dr. Lee, Dr. Churchill, Dr. Lever, Ingleby, Dr. Gooch, Dr. Ashwell, Dr. Marshall Hall, Dr. Henry Bennett, Boivin and Dugés, by Hemming, and Mr. Lee's Prize Essay, and can find no notice of a disease like the three cases detailed, all of which might be so easily mistaken for scirrhus and cancer, unless examined carefully by the aid of Simpson's speculum sound and dilator.

The first morbid change which takes place in scirrhus uteri is induration *in* and *around* the muciparous glands or vesicles, called by some *ova Nabothi*, which exist in great numbers in the cervix and margin of the os uteri. This induration is caused by the deposition of scirrhous or tuberculous matter, which thickens the parts, and gives them a greater volume, so that they feel unequal, bumpy, and knotty, like the ends of one's fingers drawn together; but in the cases described, no thickening or hardness can be either seen or felt. The severe pains are difficult to account for, unless the irritation and stretching of the neck of the uterus by the tumour can be considered sufficient; but even then, it is still more difficult to account for the absence of pain in the day time.

The *periodical* nature of the acute pain attending such fibrous tumours, which so nearly resembles that suffered in cases of cancer uteri, and the relief afforded by the treatment with iodine, will, I trust, be considered by the members of this Society, a sufficient apology for introducing the subject to their notice.

Rotherham, March 4, 1847.

CASE OF PUERPERAL MANIA,

OCCURRING AT AN EARLY PERIOD OF UTERO-GESTATION, AND RELIEVED BY INDUCED ABORTION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I propose from time to time to send you a few cases and observations copied from my note book, for publication in the Journal. Should you consider the present communication of sufficient value, you will oblige me by inserting it.

I am Sir, your obedient servant,

THOMAS SALTER, F.R.C.S.

Poole, May 20, 1847.

Puerperal Mania as its name implies, is unsoundness of mind occurring in the puerperal state, and most frequently from three to ten days after delivery, owing its origin to a peculiar irritation of the uterus derived from its previous impregnated condition. The peculiarity of the case about to be related, and to which it chiefly owes its interest, is the occurrence of mental disease antecedently to parturition, and at so early a period of gestation.

The various sympathetic derangements of the functions of the body resulting from uterine impregnation, in ordinary cases, sufficiently attest the intimate connection subsisting between the womb and its appendages with the organs of organic life, and the frequent functional disturbance of the sensorium and the spinal system of nerves, as clearly manifest its influence on animal life. I am not aware that there is any case recorded similar to the one I am about to relate, but I know of no reason why such should not have happened; indeed Dr. Ramsbotham observes, that puerperal mania sometimes occurs during pregnancy; and it may be inferred from the introductory remarks of Dr. Gooch, to his chapter "On disorders of the mind in lying-in women," that he also was aware of the fact.

Puerperal convulsions mostly occur during labour, or, as in the case of puerperal mania, soon after delivery, but convulsions precisely similar are also sometimes observed, (though rarely,) at different periods of utero-gestation. Some years since I had a patient who was thus affected in several of her pregnancies, commencing at an early period after impregnation, and who, in every instance, went on to her full time, and without any apparent injury to herself or child. Puerperal mania and puerperal convulsions are kindred affections, and are essentially diseases of the nervous system, the primary morbid impression being exercised in both cases on the peripheral extremities of the uterine nerves. For the production of the former, the irritation is propagated to the sensorium; and for the latter, being conveyed through the excito-motory system of nerves to the spinal marrow and brain, induces the epileptic paroxysms.

CASE.

The subject of the following case is a lady of about thirty-one years of age, of delicate organization, fair and ruddy complexion, with dark hair and eyes, usually enjoying good health. She has been married three years and has been three times pregnant. In her first pregnancy a disordered state of the intellect commenced about the seventh month, and after continuing a fortnight, labour came on, and in a moderate time she was safely delivered of a female child, who is now living and in good health. She again proved pregnant, and this time the mental alienation showed itself about the termination of the sixth month, manifesting the same symptoms as in the preceding attack—constant restlessness, almost total absence of sleep, and such a degree of violence of manner, as often to require four or five persons in constant attendance upon her night and day. After continuing in this state for two or three weeks, it appeared to the medical gentleman under whose care she was, necessary to bring on labour, by rupturing the membranes and evacuating the liquor amnii. This was accordingly done and in five days she gave birth to a still-born child. The violent paroxysms of insanity which before threatened her life, two days after this event ceased, and she gradually recovered her former state of mind. Soon after her removal to this neighbourhood, from the north of England, her former place of residence, she became pregnant a third time, and on this occasion the unsoundness of mind showed itself shortly after she had passed the fourth month. From this period

my attendance commenced. The preceding account I received from the lady's husband, whose intelligence and constant presence about her person, guarantee its correctness.

I was hastily requested to visit this lady at two o'clock, a.m., March 5, 1844. I was informed that previously to going to bed she had manifested considerable irritability of mind; at the time of my visit she laboured under total mental alienation, and was constantly talking in an incoherent manner. I prescribed a sedative mixture, with æther and camphor, which appeared to have some quieting effect, but scarcely any sleep was obtained through the night. After this time she became more violent and unmanageable, requiring sometimes four or five persons to keep her in bed, incessantly talking, either religiously or quite the reverse; she also had occasional fits of screaming, so loud as to be heard by the neighbours living at a considerable distance from her own residence. She continued in this state, and without any sleep, day after day.

Saturday evening, five days from my first visit, (since which she has had no sleep,) there being no improvement, and no signs of abortion occurring, in order to ensure the safety of the patient, it appeared neeessary to adopt the practice which had been so judiciously carried out in the previous pregnancy by her then medical attendant; but from the length of the cervix uteri, and its undeveloped condition at the period at which she had now arrived, I felt that greater difficulties would present themselves in rupturing the membranes than on the occasion referred to. On making an examination for this purpose, the os uteri was found high up, and situated backwards towards the sacrum, and was therefore with difficulty reached; it was, moreover, so closed, as not to admit the point of the finger. The cervix was, as far as could be ascertained, of the usual length of that of the unimpregnated uterus. By passing the stilet of a catheter on the front part of the fore-finger of my left hand, whilst that member was in the vagina, and pressing against the os uteri, I made an attempt to puncture the membranes. Much difficulty was experienced in passing the stilet through the cervix, which, however, I once effected, but no fluid followed its withdrawal. As I therefore did not succeed in my object, and fearing the cervix uteri might be injured by further trials, I desisted for the present from the purpose I had in view, and determined to make trial of the ergot of rye, in the hope by the influence of that drug to produce abortion. It was exhibited in the form of infusion, in proportion of three drachms of the powder to eight ounces of boiling water, giving one ounce of the infusion, with a drachm of the tincture, every two hours. From the violent and unmanageable condition of the patient not allowing it, the medicine was not given either as often or as regularly as could have been wished, and no sensible effect being produced by it, on Monday, the 11th, a scruple of the powdered ergot was added to each dose of the infusion.

Tuesday evening, March 12th. Another attempt was made to puncture the membranes, and which happily proved successful. On this occasion the os uteri was found to be slightly opened, and the cervix seemed also somewhat shortened,—changes favouring the operation, and evidently produced by the use of ergot. From the state of the patient's mind it was difficult to ascertain whether or not there were any uterine pains. Remembering the difficulty experienced in my first essay, and the danger there appeared of injuring the cervix uteri, I, on this occasion, employed an instrument, (contrived by my son, Mr. S. J. A. Salter, now a student in the Medical School of King's College,) expressly with the view of avoiding the possibility of this accident. It consisted of a flexible gum male catheter, but of sufficient firmness to preserve its straight form, even when opposed to a moderately-existing body, having a perforation at its extreme point, just large enough to allow a common wire stilet to pass through.

The patient, lying on her left side, and near the edge of the bed, the catheter was introduced into the vagina with the right hand, and pushed forwards upon the anterior surface of the fore-finger of the left, and in this manner it readily entered the os uteri, and passed through the cervix; withdrawing the finger from the vagina and os uteri, the instrument was pressed forward until it met with steady resistance. The stilet was then introduced and passed on, making its exit at the opening prepared for it, when it was immediately found to have perforated the membranes. Renewed pressure being then made upon the catheter itself, that also entered the cavity of the amnion, and on withdrawing the stilet the liquor amnii flowed in a full and continuous stream, as urine is observed to do from a catheter introduced into a distended urinary bladder. The fluid collected amounted to about a pint and a half. Nothing could have been more successful than the use of this simple instrument, and I would venture to recommend its employment to my professional brethren, as equally adapted for the purpose for which it was had recourse to, as the ingenious cutting instrument contrived and recommended by Dr. Ramsbotham, which I did not happen to possess, and the use of which, in unskilful hands, might not altogether be unattended with danger, and be especially hazardous in cases where the cervix and os uteri are undeveloped, as in the present instance.

After the evacuation of the liquor amnii, the patient took one or two more doses of the ergot of rye, but as its previous exhibition had not occasioned any very decided uterine action, as evidenced by the absence of the usual pains, and the liquor amnii being so entirely evacuated, the further use of the medicine was not urged, in the confident belief that the ovum would be soon expelled by the natural efforts.

In the middle of the night of Thursday, the 14th, (nine days after the commencement of the mental derangement, and fifty hours subsequent to the puncturing of the membranes,) expulsive pains came on, and the delivery was accomplished at two o'clock on the morning of the 15th, being fifty-two hours after the rupture of the membranes and the discharge of the liquor amnii. In a very short time subsequent to this there was a manifest improvement in the state of the patient, and though still incoherent, and having

occasional paroxysms of violence, she became more quiet and manageable, and slept occasionally for a few hours. On the second day there were intervals of comparative soundness of mind. Since this period her improvement became gradual, and though slow, regularly progressive, and she is now, (April 5th,) in her usual health in every respect. She had, however, two or three violent paroxysms after her delivery, and frequently awoke from her sleep in a fright, screaming violently, and she, moreover, passed many nights without sleep; at such times, as well as previous to delivery, to procure rest, opiates were occasionally given, but they only appeared to answer the purpose once or twice, and from their heating and other effects, seemed to be rather injurious than otherwise.

During the whole progress of this case, the pulse was seldom more than 100 in a minute, and often not more than 80; the skin was cool, and there was upon the whole less disturbance of the functions than might *a priori* have been expected from the violence of the symptoms, and the long absence of sleep.

May 20th, 1847. This lady is now living, and in good health, but has aborted once without any unusual circumstance happening, the only time of her being pregnant since the above case occurred.

IPECACUANHA IN THE BITES OF VENOMOUS ANIMALS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

If you consider the following case likely to be useful on further inquiry, in the relief of venomous bites of reptiles and stings of insects, I wish you would publish it. I must own it made a great impression on my mind, and I should be glad if the profession generally would try the remedy and publish the results if successful. I have never had another case, but many of my friends have found it useful in the sting of wasps.

I remain, yours faithfully,

HENRY COLLET.

Worthing, June 12, 1827.

Some years since the daughter of ——— Templer, Esq., about eight years old, had her hand upon the companion ladders of the East India ship, *Malcolm*, when she suddenly felt it bitten by something which was not observed, but the two specks on her finger plainly showed the marks of a centipede's fangs, of which many of very considerable size had been caught. As surgeon of the ship I was called to her assistance, and found her in very great suffering, and after exhausting all the remedies usually considered useful,—oil, spirit, laudanum, ammonia, &c.,—I recollected having been informed by an old officer in a previous voyage, that the best cure for the bite of a rattlesnake was ipecacuanha. I fetched a bottle of wine of ipecacuanha from the chest, and gave it to the mother to apply locally, at the same time telling her that I had not the slightest faith in the remedy; but to my surprise and delight she came out of her cabin in two minutes, to tell me it had stopped the pain instantly. I requested her to re-apply it if necessary. The pain returned once when it again immediately and entirely relieved it. If so minute a quantity as is contained in the wine, could be attended with such good effects, I think much more might be expected from its use in the concentrated form of emetine.

Hospital Reports.

HÔPITAL DE LA PITIÉ, PARIS.

A CASE OF MENINGO-MYELITIS.

(Communicated by SEPTIMUS LOWE, Esq., M.R.C.S.E.)

History of the case; present attack; symptoms on admission; treatment; remarks.—Importance of a proper diagnosis from lesion of the brain; from a tumour or ramollissement, &c., of the spinal cord; from epilepsy, spinal irritation, &c.—Indications for treatment.

M. B., a boy, aged 16, was admitted into the Hôpital de la Pitié, under Professor Piorry, April 21st, 1847. He is slightly made, rather short for his age, of lymphatic temperament, and fair complexion. He appears to be very cheerful and intelligent, and answers questions with great perspicuity and accuracy. He states that for eight years he assisted his father to carry wood, and was constantly exposed to all kinds of weather. During the last year he has been a fringe-maker, residing at Paris, working in the same room with several other persons, and sleeping alone in a small but well ventilated apartment. His food has generally been neither very abundant nor very wholesome. He was always rather weak and small for his age. He has occasionally suffered from severe colds, but he never had an attack of epilepsy, convulsions, or any serious illness, previous to the present disease. About three or four days since he was purged considerably; the purging ceased yesterday. Last night he was suddenly seized with a burning tingling sensation in the right hand and right side of the head; he soon afterwards experienced cramp in the right fore-arm and hand, and towards morning the left arm and hand, as well as the inferior extremities, became painful and contracted; he found he could not close his hands, the fingers being rigid and partially flexed; he also states that he had considerable difficulty in forming his words, so that his utterance was somewhat impeded. He never lost consciousness in the least.

At present he appears perfectly sensible; the face is quite natural; the pupils are sensible to light; he complains of great pain and burning in the head, especially on the right side, but he says it does not extend deeply; the thumbs and fingers, as well as the fore-arms, are rigid, contracted, and partially flexed, so that he cannot close his hands; he feels severe crampy pain in the hands and fore-arms, and a sensation of burning, tingling, and formication, in the right

thumb, the palms of the hands, and the soles of the feet; the feet are drawn up, flexed, rigid, and contracted, so that he appears to have talipes equinus; the calves of the legs are hard, cord-like, and painful on pressure; the muscles of the thighs are also somewhat contracted and rigid. On examining the spine, percussion over the cervical region produced no effect whatever, but on approaching the fifth dorsal vertebra, the patient cried out as if in great pain, and the legs, feet, and thighs were spasmodically contracted. On descending towards the lumbar region, the contractions and pain were greatly aggravated; the patient referred nearly the whole of the pain to the inferior extremities, the shocks being but slightly felt in the spine itself, and not at all in the head and upper extremities, nor were the muscles of the trunk affected in the least. The respiration is natural; the lungs and heart appear to be quite healthy; the pulse is firm, resisting, and 90; the tongue is slightly furred; there is no thirst, nor nausea, nor vomiting, nor tenderness on pressure over the abdomen; the bowels are regular; the urine is passed freely, and is natural in colour and quantity. The patient states that he has not received any injury to the spine, nor has he been exposed to cold, nor is he aware of any circumstances likely to have induced the attack.

Ordered thirty leeches to the spine, and afterwards four small blisters, two to be placed above, and two below, where the leeches were applied. To have ice applied over the spine. Low diet.

About an hour and a half after the application of the leeches, the pain in the head gradually abated, the contraction and rigidity of the extremities was almost removed, but the pain and formication in the thumb and soles of the feet continued.

22nd. The patient expresses himself greatly improved; he still complains of the heat, and tingling, and formication in the right thumb and the soles of the feet; the calves of the legs are stiff, sore, and tender on pressure; percussion over the vertebræ occasions no pain or contraction of the extremities; the pulse is soft, small, and 80; the bowels are regular; the appetite is improved. To have a large blister applied over the lumbar region.

24th. The formication in the thumb and soles of the feet has nearly disappeared; there is still tenderness on pressure in the calves of the legs; the patient feels weak, but can walk perfectly well; convalescent. To have middle diet.

28th. The whole of the distressing symptoms entirely removed. The patient continues rather feeble, but will be able to leave the hospital in a few days.

Professor Piorry observed, that in forming our diagnosis of the case before us, we must carefully take into consideration the whole of the symptoms, and the circumstances likely to have induced them, for should we be deceived in determining the nature of the disease, we might be led to adopt a treatment the most hurtful and injurious. Thus, we may ask, is it possible that it may be a lesion of the brain? If it were so, the pain in the head would be more deeply seated, more intense, and extended over a larger surface; the organs of sense would most probably be affected, and there would be loss of consciousness, or convulsions, &c. May it be myelocele, (a tumour in the spinal cord,) or myelomalacia, (ramollissement of the cord,) or hæmomyelorrhagia, (spinal apoplexy.)? If it were any one of these affections, there would be partial paralysis or convulsions, and the nerves given off below the seat of the disease would be chiefly implicated. Again, is it probable that it may arise from epilepsy, convulsions, or chorea? There is nothing in the history of the case to indicate a predisposition to one or other of these affections, and the symptoms are totally opposed to such a supposition. Again, can we regard it as a case of what authors designate spinal irritation? It is true the debility of the patient, the absence of any recognizable exciting cause, and the small degree of reaction, might lead us to conclude it was so; but if, on the other hand, we consider the suddenness of the attack, the gradual augmentation and persistence of the symptoms, the violence, character, and extent of the pain, &c., we are perfectly justified in pronouncing it to be a case of meningo-myelitis. Thus, under inflammation, the sensibility of the cord is exalted; on percussing over the spine, the shock is carried to the extremities, causing contraction of the muscles, pain, &c. Again, the meninges being also affected, the irritation is propagated to the nerves as they pass through the foramina; this irritation extends by small communicating branches to the superficial nerves of the head, the ninth nerve, and the nerves of the upper extremities.

Having determined the inflammatory nature of the affection, our indications for treatment are very obvious. The patient's strength will scarcely admit of general bleeding, nor is it indeed necessary. The free circulation in the rachidian vessels, and their communication with those of the exterior through the foramina, point out how readily we may produce a decided effect upon congestion of the cord and its membranes by local blood-letting alone, and how easily we may subdue the excited circulation by the application of topical refrigerants; the after application of blisters will tend to remove the inflammatory products, should there be any. The speedy and favourable results of the treatment prove the diagnosis to have been perfectly correct, and show that resolution was obtained before the occurrence of any very material or extensive lesion, and the case may be considered as having proceeded no farther than what is denominated by Professor Millar "active congestion."

Paris, June 3rd, 1847.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, JUNE 30, 1847.

A case of poisoning with hydrocyanic acid, attended by circumstances which give peculiar interest to it in a medico-legal point of view, has recently occurred in Worcester. It will be recollected that an inquiry into a case of poisoning by the same agent, in which there was the

manifestation both of consciousness and volition after swallowing the poison, took place some time ago at Bristol. In this case, which was reported at the time by Mr. Godfrey, (*Provincial Medical* and *Surgical Journal*, 1844, p. 398,) the individual, a man 44 years of age, after taking half an ounce of the acid, had walked ten paces to the head of the stairs, descended the stairs, seventeen in number, and then proceeded rather quickly to a druggist's shop, forty-five paces distant, where he had procured the acid, entering the shop in his usual slow and easy manner, and asking for "more of that prussic acid," before he became evidently affected by the poison which he had swallowed. In this instance, at least five minutes must have elapsed from the time of swallowing the poison before death took place, but there was no evidence to show the actual strength of the acid taken.

Another somewhat similar case is reported by Mr. Nunneley, of Leeds, (*Provincial Journal*, 1845, p. 461,) but in this also neither the strength of the acid, nor the quantity actually swallowed, could be accurately ascertained. Both cases were, however, further remarkable, in that there was neither convulsions nor shriek.

The case to which we are now referring will be found to differ from the foregoing, in that both the dose and the strength of the acid made use of are known. We subjoin the more important part of the evidence given on the inquest:—

Mr. John Stringer, druggist, of St. Swithin Street, deposed that the deceased, Mr. Benjamin Shepherd, surgeon, occasionally came to his shop to write a prescription, but he never made any purchases until yesterday. About one o'clock yesterday (Tuesday, June 8th,) he came to witness's shop with his sister, Mrs. Hill, and after the usual salutation, he said, "Just put me up two drachms of Scheele's prussic acid." Witness procured what was required, and handed it to the deceased in a bottle regularly labelled. Mr. Redgrave, of New Street, came in just at that time, and complained of a pain in his bowels. Witness, in joke, observed to him, "You had better take a dose of this," meaning the prussic acid. Mr. Shepherd thereupon observed, "That will cure you directly; you can't have anything better." Some further conversation took place, and shortly afterwards Mr. Shepherd left the shop, and returned again in a few minutes with Mrs. Hill. He then asked for an ounce of carbonate of soda, and placed a sovereign on the counter to pay for it. Witness declined at first to receive payment for so trifling an article, but as the deceased insisted on paying for it, witness gave him the change. The deceased then asked if any one was in the back room. Witness replied "No," and the deceased then walked into the room, saying to witness, "I want a word with you." Witness followed him into the room within two minutes (being detained by a customer in the shop,) and found him sitting on the sofa. On witness going into the room he saw no alteration in him, but observed on the table the bottle in which the prussic acid had been placed, empty. [The bottle was produced: it was quite empty.] I said, "Good God, Shepherd, you have not been taking that." Deceased replied smiling, "No, no; its all right; take no notice. Give me your hand, old fellow." Witness went up to him, and the deceased added, "God bless you. Its all right; take no notice." Witness immediately took up his hat and went to fetch Mr. Griffiths, the nearest surgeon. Mr. Griffiths was from home, but came shortly afterwards, and witness proceeded to the top of Broad Street, where he met Mr. Pierpoint, who ran back with him, and found deceased on the floor, but not dead. Mr. Pierpoint and witness tried to administer ammonia, as an antidote to the prussic acid, and an attempt was made to produce vomiting. This did not succeed, and the stomach-pump was sent for, but on its arrival the deceased had just died. The quantity of Scheele's prussic acid in the bottle was about 120 drops, which contained about six drops of the real acid. This would kill a man instantaneously. Deceased had drunk some water in the shop just before he took the prussic acid. This would prevent the acid acting so rapidly.

Mrs. Stringer, wife of the preceding witness, deposed that she was below stairs when she heard some one go into the parlour over her head. She immediately went up stairs, (about twelve steps,) and looking through the glass door, saw the deceased on the sofa in the act of drinking something. She then went down stairs, and in about ten minutes, she heard footsteps of a person passing quickly. She then went up stairs again and found the deceased on the floor, Mr. Stringer having left the room to fetch a surgeon. Thinking he was in a fit, she placed a sofa-pillow under his head and unfastened his neck-cloth, and soon after Mr. Stringer returned with Mr. Pierpoint.

Mrs. Hill, sister of the deceased, deposed that her brother asked her on Tuesday if she was going into town, as he would go with her. Witness accordingly went with him to Mr. Smith's, in Sidbury, from whence they proceeded along Friar Street, and New Street, to Mr. Stringer's. Her brother had lately appeared much bewildered, as he did on Tuesday morning, and she had frequently to ask him questions two or three times before he appeared to understand her. She did not know what could have led to this, until last Sunday, when he read to her and her father an anonymous letter which he had received, observing that that letter was enough to disturb him. Her brother complained on Sunday of his head being hot, and had appeared incoherent in his manner for several days. He said that the people were all making signs at him; this impression appeared to be very strong on his mind. On Sunday and Monday he was continually making signs by moving his arms, placing them across his breast, &c.; witness endeavoured to dissuade him from such actions, but he persisted in them. The witness's evidence went further to corroborate what has already been stated in Mr. Stringer's evidence. She added that on her brother leaving Mr. Stringer's for the first time, he wished her to go on home while he returned to Mr. Stringer's for something else which he wanted; but witness having some misgivings, returned with him, and then he bought the carbonate of soda, and went

into Mr. Stringer's parlour. Witness entreated Mr. Stringer to follow him, as she was afraid there was something the matter with him. Mr. Stringer returned in a minute, exclaiming, "He has taken it." Witness rushed into the parlour and met her brother, who advanced towards her about a yard into the room, and said, "Good bye, Mary; God bless you; I have taken it." The witness's recollection here became indistinct from excitement. She said that her brother at first complained of being sick, but almost immediately he fell upon the floor. He did not eject anything from his stomach. She fully believed her unfortunate brother to have been much bewildered, and not in his right senses, when he was in Mr. Stringer's shop. He had previously complained of want of sleep, and took laudanum on Sunday for the purpose of procuring sleep. He had taken it on previous occasions for the same purpose, and to prevent coughing, he having some twelve months ago ruptured a blood-vessel in the lungs. Her brother had lately carried about him a large knife from his surgical instrument case, saying that "it was quite necessary in these times." He appeared afraid to go out alone.

M. Pierpoint, Esq., surgeon, stated that he was called in by Mr. Stringer to the deceased about one o'clock yesterday morning. He found him lying on his back on the floor in Mr. Stringer's parlour, his head lying on a sofa-pillow, and apparently dead. Mrs. Hill and Mrs. Stringer were present, and having raised the deceased, witness mixed some ammonia and water in a wine-glass, and attempted to pour it down his throat, but he did not swallow any portion of it, and none reached the stomach. Witness also applied a feather to the inside of the throat, with the object of producing vomiting, but without effect. He then sent for a stomach-pump, and in the mean time the deceased heaved a sigh or two and was dead. There was no pulsation at the wrist or heart."

The appearances observed on a *post-mortem* examination were here detailed. The following are the notes taken by Mr. Pierpoint at the time, to whom we are indebted for them:—

Countenance (particularly the lips,) livid; neck, shoulders, and all the posterior part of the trunk purple. On dividing the integuments, dark blood flowed freely; the blood of the body universally dark and quite fluid; the lungs loaded with dark blood, which had to a considerable extent gravitated to their posterior portion. The right auricle and right ventricle of the heart, and vena cava, full of dark fluid blood; the left ventricle firmly contracted and quite empty. Five out of six gentlemen did not perceive any odour of prussic acid upon approaching the body, either before or after it was opened. All the abdominal viscera healthy; urinary bladder half full of urine, which exhaled no unusual odour; brain natural, but full of fluid blood. The stomach contained about one onnce of raspberry-coloured looking fluid, and had a strong smell of almonds; the stomach itself, particularly at its cardiac extremity, had a very vascular appearance, and in some of the patches oozing of blood had evidently taken place. Some of the patches had also a brownish appearance.

It is obvious from the foregoing account that the time which elapsed from the swallowing of the acid to the fatal termination must have been some minutes. There was both consciousness and volition manifested, according to the evidence of Mr. Stringer, about two minutes, and according to that of the sister, for some time longer, after the poison had been taken. There was no evidence of the occurrence of either convulsions or shriek.

As the quantity of the acid measured out to the deceased was known, and as he was seen to drink it out of the bottle, the bottle being afterwards found quite empty, it became very desirable that the strength of the acid should be accurately ascertained, Mr. Stringer was therefore asked for a similar quantity of the acid taken from the same bottle. This was put up in a sealed phial, and sent to Mr. Alfred Taylor, of Guy's Hospital, with a request that he would be good enough to submit it to examination. To Mr. Taylor's kind compliance with this request we are indebted for the following notice:—

The phial contained 105 drops, weighing 98 grains. The whole of this was precipitated by a solution of nitrate of silver in excess. The precipitate (cyanide of silver,) was thrown on a filter, and washed until the washings were no longer affected by chloride of sodium. It was then thoroughly dried in a vapour bath, and weighed in a balanced filter.

The quantity of dry cyanide of silver obtained was 9.3 grains; and as 100 of cyanide are equal to 20.14 of anhydrous acid, the quantity of *anhydrous* prussic acid, present in the 98 grains of the acid forwarded, was equal to 1.87 grains.

Ag.Cy.		H.Cy.		Ag.Cy.		H.Cy.
100	:	20.14	: :	9.3	:	1.87

The acid, therefore, had a strength of rather more than 1.9 per cent., or nearly 2 per cent. I presume therefore it was intended to be the acid of the London Pharmacopœia.

The quantity of acid taken, according to Mr. Stringer's evidence, may possibly have been somewhat more.

Traces of the acid were found by Mr. Orwin in the fluid taken from the stomach, by whom it was submitted to examination.

This case, therefore, the leading features of which have here been detailed, adds another instance to those already on record, in which life was not immediately extinguished by a fatal dose of the poison,—in which certain acts implying consciousness and volition were performed, and in which death, as far as could be ascertained, was not preceded either by convulsions or the "shriek." It differs from former cases in this important particular, that the actual quantity taken, and the strength of the preparation, have been determined.

Proceedings of Societies.

YORKSHIRE BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ANNUAL MEETING.

The Annual Meeting of this Branch was held at the Cutlers' Hall, Sheffield, on Thursday, June 10th, and was attended by the following members and visitors:—Mr. Beckitt, Sheffield; Dr. Belcombe, York; Dr. Branson, Dr. M. de Bartolomé, Sheffield; Dr. Chadwick, Leeds; Mr. Hanworth, Sheffield; Mr. R. Hey, Mr. Husband, York; Mr. Hunter, Mr. H. Jackson, Mr. W. Jackson, Mr. Kitching, Mr. Law, Sheffield; Mr. Metcalfe, York; Mr. Micklethwaite, Mr. Nicholson, Sheffield; Mr. Parry, Harrogate; Mr. Porter, Sheffield; Mr. Price, Leeds; Mr. Ray, Mr. Reedal, Mr. Roper, Sheffield; Dr. Shearman, Rotherham; Dr. Simpson, York; Mr. Thomas, Mr. Turton, Sheffield; Mr. Williams, York, &c. &c.

The Secretary (Mr. Husband) stated that he had been requested by Dr. Belcombe, the retiring President, to express his regret that he could not be present at the commencement of the proceedings, to resign the chair to his successor, but that he hoped to join the meeting before its close. The Secretary, after alluding to the lamented death of the President-elect, during the past year, stated that the Council had appointed Mr. H. Jackson to supply the vacancy thus occasioned, and had no doubt that the members would confirm the election of a gentleman so well qualified for the office of President.

Mr. H. Jackson having been called to the chair by acclamation, proceeded to address the meeting. The President commenced by stating that though he would yield to many of his predecessors in ability to discharge the duties of the office, to which he had been elected in so flattering and kind a manner, he would not yield to one of them in his anxious wish to fulfil its duties. He then alluded in eloquent and affecting terms to the loss the Branch had sustained in the death of his late friend and colleague, Dr. Favell. He could bear testimony from personal experience of the talents and worth of his departed friend, who, from wise and inscrutable purpose of Almighty wisdom, was snatched away, when a long promise of honour and wealth was just opening to his view. The Health of Towns' Bill, and the Medical Registration Bill, were next adverted to, and the President, in conclusion, eloquently and forcibly pourtrayed the advantages to be derived from combined exertion, and expressed his earnest hope that this would not be the last time the Branch would meet in the town of Sheffield.

The Secretary then read the following report of the Council:—

"In presenting their sixth Annual Report to the members of the Yorkshire Branch of the Provincial Medical and Surgical Association, the Council have very few observations to offer on the occurrences of the past year.

"Though the progress of medical science during the period which has elapsed since the last meeting, bears ample testimony to the zeal and ardour of its followers, the more general interests of the profession which furnish the subject matter for a report, require little comment.

"The Branch continues to be numerically prosperous, and your Council cannot but express their sincere conviction, that this visit to a locality known to many of our members only by the fame of many successful cultivators of the wide domain of medical science, will give new accessions to its members, and impart fresh energy to its proceedings.

"Another attempt is being made to arrange the *vexata quæstio* of medical reform, and to reconcile the conflicting claims of our various medical corporations by an initiatory step in re-organizing the profession. Undeterred by the failures of several of our statesmen, Mr. Wakley has introduced a bill into parliament, which is now before a Committee of the House of Commons, whose report may be looked for with some interest. The principles which the Association and Branch have so often advanced, as those alone on which a satisfactory arrangement of this important question can be effected, must be well known to every one here present. The bill now in Parliament must receive several important modifications before it can, in accordance with these principles, receive the unqualified support of the members of this Branch.

"Your Council cannot but indulge a hope that the improved management under which parochial relief is to be placed, will lead to more liberal, and hence adequate remuneration to the Poor-Law medical officers. In the late debate on this question, Sir James Graham distinctly admitted the great value of the medical services rendered to the poor, and it is not surely asking too much of the Legislature, when the profession demands that its members shall no longer be degraded by being compelled, in self-defence, or for more unworthy motives, to accept a pittance which levels the services of a skilful and intelligent professional man with those of an ignorant and uncultivated mechanic.

"The last year has not passed away without reminding us of the uncertainty of all human events. Scarcely twelve months have elapsed since, at our last meeting, one well-known to all here present, and to many so intimately, was elected president of this Branch. In this the cherished sphere of his labours, the members hoped to receive the assistance of his able and well-stored mind in directing its proceedings, and imparting interest to its annual meeting. But "*Dis aliter visum*," and we must submit. As a physician, Dr. Favell was a careful observer, a correct reasoner, a successful practitioner; as a man, he was honourable and upright in every word and deed, cultivating not only a high moral tone, but basing that culture on religion as the only true source of pure and unspotted morality. "*Multis ille bonis flebilis occidit.*"

"Another highly valued Member has also rested from his earthly labours. The late Mr. Muscroft of Pontefract, by a straightforward, honourable, and active exercise of his profession, gained the esteem of a large circle of friends, and the regret felt for his loss strongly testifies to the value of his professional

services. Having paid this merited tribute to departed worth, we may now turn to a more cheering theme in the future.

"The prospects of the future are cheering. Knowledge is being generally diffused; prejudices once deeply rooted, are rapidly yelding to the progress of the age; the bounds of professional knowledge are becoming wider and wider; and we may hope, that as an improved preliminary education may better enable the aspirant to medical knowledge to cultivate the wide field before him, so it will also render him, when he shall have entered upon its active duties, a still more useful and respected member of our common community. To elevate the character of our profession generally, we must endeavour to raise the individual standard of intelligence and high mindedness of its members, and thus elevate the dignity of the 'healing art,' by rendering each of its followers a representative of the intelligence and high character of the whole."

Dr. Shearman moved, and Dr. de Bartolomé seconded the adoption of the report, which was carried unanimously.

Mr. Husband proposed, and Dr. Chadwick seconded the appointment of Leeds, as the place for holding the next Annual Meeting.

Mr. Hey, of Leeds, was unanimously chosen President-elect.

The Branch Council was re-appointed.

No observations being offered on matters connected with the interests of the profession, the following papers were read:—

"On the Inhalation of Æther," by Mr. Thomas.

"A description of a new instrument for dividing small bones, or the protruding ends of the larger bones when fractured; and of a needle for passing a ligature for the cure of bronchocele."

"On Perforation of the Carotid Artery by an external Ulcer," by Mr. W. Jackson.

"A Case of Fæcal Abscess," by Dr. Thurnam.

Votes of thanks were passed to the authors of the papers, the President, and the Secretary. The Members then retired and afterwards dined together at the Tontine Hotel.

SUFFOLK BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ANNUAL MEETING.

The Annual Meeting of the Suffolk and Norfolk Branches of the Provincial Medical and Surgical Association, was held at Beccles, on Thursday, the 17th of June. There were present—J. G. Crosse, Esq., Dr. Ranking, Edward Crickmay, Esq., W. B. Francis, Esq., Norwich; W. H. Crowfoot, Esq., W. H. Davey, Esq., Beccles; J. Beales, Esq., Haleswater; William Jeaffreson, Esq., Framlingham; Dr. Kirkman, Melton; W. Muriel, Esq., Wickham Market; W. Worthington, Esq., Lowestoft; H. L. Freeman, Esq., Saxmundham; H. C. B. Steele, Esq., Stoke Ferry; Alfred Harmer, Esq., Wrentham; John Currie, Esq., Bungay; Dr. Wake, Southwold; C. R. Bree, Esq., Stowmarket, Hon. Secretary for Suffolk. And as visitors, Dr. Crowfoot, H. Davey, sen., Esq., William Crowfoot, jun., Esq., R. Dashwood, Esq., W. Sharpin, Esq., Beccles; N. B. Fisher, Esq., Bungay; Dr. Lanchester, Yoxford; the Rev. Mr. Howman, Bexwell; and Lieut. Salmon, (East India Company's Service,) Stoke Ferry.

In the absence of Mr. Bullen the chair was taken by J. G. Crosse, Esq., who, after addressing the meeting resigned it to the President-elect, William Henchman Crowfoot, Esq.

Mr. Crowfoot, on taking the chair, claimed the indulgence of the meeting, and stated that he should rely upon their kindness for aid in the discharge of the duties of his office, more particularly as those duties had been so ably fulfilled by his predecessor, Mr. Bullen. He expressed his gratification in seeing so many of the members of the Association and their friends around him, for they had probably all seen the coarse and unprovoked attack which had been made on the Council of the Association by the *Medical Times*, and they would now be able to form their own opinions as to the character of our proceedings. To the accusation that the Association had not strenuously supported the cause of Medical Reform, he would reply that he should be glad if it were so. (Cheers.) The Association was not formed for political purposes, but for the diffusion of practical information, for the promotion of social and friendly intercourse amongst its members, and for sustaining the honour and respectability of the profession by cultivating a high and generous tone of feeling among practitioners, both towards their patients and towards each other, and by discountenancing all mean and unworthy conduct. (Loud cheers.)

In the attainment of these objects, he thought we had been eminently successful, and that the more closely we confine ourselves to the first principles of the Institution the better. He was happy to inform the meeting that some interesting papers would be read, and that Mr. Hutchinson, the author of the very ingenious and elaborate paper in the last volume of the "Medico-Chirurgical Transactions," on respiration, would afford them some valuable information on the use of the spirometer in detecting incipient disease of the lungs, and on the mechanism of respiration. (Cheers.)

The following papers and cases were then read to the meeting:—

1. Dr. Ranking detailed an interesting case of supposed syphilitic disease of the larynx, and exhibited the morbid specimen, as well as a beautiful model of the same in wax, which we understood was made by Mr. Cobbald, a pupil of Mr. Crosse. The disease, as shown in the preparation, consisted of two circular ulcerations, at the base of the oral aspect of the epiglottis, extending on to the superior surface of the root of the tongue. The patient had nearly complete aphonia, and died with all the symptoms of laryngeal ulceration. The singular and unusual position of the disease excited much attention, and elicited an interesting discussion from the meeting.

2. A paper (which will be published in the Journal,) was read by Mr. William Crowfoot, jun., upon an extremely interesting and rare case of cirsoid aneurism

of the temporal artery. The patient was exhibited to the meeting.

3. A case of sacculated aneurism of the œsophagus, with remarks, (which will also be published in the Journal,) was read by Mr. Worthington, and the morbid parts shewn to the meeting.

Mr. Worthington also exhibited a rare, and perhaps unique specimen of stricture of the trachea, with absorption of the cartilaginous rings immediately below the larynx. The case has, we understood, been published in the "Medico-Chirurgical Transactions." The same gentleman also exhibited a specimen of sacculated bladder.

4. Two cases upon the use of matico in hæmorrhage, contributed by Mr. Gorham, of Alderton, were read to the meeting by the Secretary.

The first case was that of a man, 80 years of age, who was the subject of hæmaturia, and in the treatment of which all remedies failed until the matico was used. He took the infusion in ounce doses, three times a day, for a month, and although he ultimately sank under the disease of the bladder, he was greatly relieved, and his sufferings much mitigated by the use of the remedy.

The second case was one of uterine hæmorrhage, occurring a fortnight after delivery, which resisted the use of ordinary astringents, cold applications, and the plug, but which readily yielded to the internal administration of the decoction of matico, in ounce doses, every two hours, at first diminishing the dose, and lengthening the intervals as the symptoms gave way. Full doses of opium were administered at night.

The following resolutions were then proposed to the meeting, and carried unanimously:—

Proposed by Dr. Ranking, seconded by Mr. W. H. Davey,

"That the place of meeting of the Suffolk Branch for 1848, be at Bury St. Edmunds, and that Dr. Hake be requested to preside."

Proposed by Mr. Crosse, seconded by Mr. Beales,

"That this meeting approves of the general principle of the Registration Bill, at present before the House of Commons, and that a petition be presented to parliament by Lord Rendlesham, praying that the said Bill, with any amendments which may in Committee be deemed advisable, be passed into a law."

The following petition was then read by the Secretary, and the Chairman requested to sign it on behalf of the meeting:—

"To the Honourable the House of Commons of Great Britain and Ireland in Parliament assembled.

"The humble petition of the members of the Suffolk and Norfolk Branches of the Provincial Medical and Surgical Association, at Beccles assembled."

"Sheweth,—

"That your Petitioners observe that a Bill is now before your Honourable House, entitled 'A Bill for the Registration of Qualified Practitioners, and for amending the law relating to the practice of medicine, in Great Britain and Ireland.'

"That your Petitioners are of opinion that the registration of all duly qualified practitioners, and the legal recognition of such, are calculated to be of great benefit, both to the public and to the medical profession; and that your Petitioners seeing that such registration and recognition are provided for in the aforesaid Bill, are of opinion that the leading principles of the measure are sound and equitable, aad earnestly hope therefore that your Honorable House will be pleased to give your sanction to the same, and pass the Bill into a law, with such amendments as may seem to your Honourable House desirable.

And your Petitioners will ever pray.

W. H. Crowfoot, Chairman.

Proposed by Mr. Worthington, seconded by Mr. H. L. Freeman,

"That the thanks of the meeting be presented to Dr. Evans, for his past services as Treasurer of the Eastern Branch, and that J. G. Crosse, Esq., be requested to undertake the duties of this office, vacant by that gentleman's resignation."

Proposed by Mr. Jeaffreson, seconded by Mr. H. C. B. Steele,

"That the best thanks of this meeting be presented to those gentlemen who have read papers."

Proposed by Mr. Crosse, seconded by Dr. Ranking,

"That Mr. Beales, of Halesworth, be requested, on behalf of the Association, to communicate with the Apothecaries' Society upon the illegal practice of a person called Cleveland."

The case, related by Mr. Beales, which led to this resolution, was a very gross one. The man, Cleveland, is a farmer, living, as we understood, at Halesworth, and attended a poor man four or five years ago for rheumatism, and sent him in a bill charged like that of a medical man, as follows:—

A mixture, 2s. 6d.; embrocation, 1s., &c., &c., to the amount of £2 16s. 0d. The poor man could not then pay the demand, but having lately got increased work, Cleveland summoned him to the newly established Court for the recovery of small debts, and succeeded in obtaining an order from the judge for payment of his demand. It appeared that Cleveland visited the patient, felt his pulse, &c., and when in the Court assured the judge that "he knew all about it, for he had attended medical cases ever since he was a boy."

A very strong feeling was manifested in the meeting, upon the propriety of establishing a fund especially for prosecuting this sort of people, (chemists and druggists, *et id genus omne*,) who interfere in what they know nothing about; and it was suggested that the members of the Association would be glad to pay an extra subscription (of say 5s. a year,) for this purpose, and that such a resolution would greatly add to the members of the Association.

Proposed by Dr. Kirkman, seconded by Mr. Muriel,

"That the thanks of this meeting be presented to the Mayor and Corporation of Beccles, for the use of their Council Chamber for the purposes of this meeting."

The meeting now adjourned to an adjoining room to hear a lecture by Mr. Hutchinson, on "The Capacity

of the Lungs, and on the Respiratory Functions, with a view of establishing a precise and easy method of detecting disease by the Spirometer." This lecture gave the most lively satisfaction, and was listened to with intense interest by the meeting. Mr. Hutchinson's researches are now well known to the profession from his elaborate paper in the 29th volume of the "Transactions of the Royal Medical and Chirurgical Society," as well as from his public lectures, an abstract of one of which was given in a former number of this Journal, (*Prov. Med. and Surg. Journal*, April 21st, p. 212.) It is a subject of vast importance to the profession, and we strongly advise all who can to *hear* one of Mr. Hutchinson's instructive lectures, and all who cannot, to study his published essay. The spirometer bids fair to rival the stethoscope in the early stages of pulmonary disease. We all know the uncertainty and the difficulty of physical diagnosis in these cases, but if the spirometer bears the test of further and extended experiment, (and there is a wonderful exactitude between its actual and calculated results in a state of health,) there can be no doubt but that the difficulty will be removed, and if it does no more than confirm a doubtful diagnosis, it must still be considered a most valuable addition to medical science. The lecture was illustrated by a large number of instructive diagrams and tables, and the action of the intercostal muscles very beautifully shown by a simple and ingenious piece of mechanism.

At the conclusion, Mr. Crowfoot proposed a vote of thanks to Mr. Hutchinson, for his instructive and interesting lecture. Mr. Crosse, in seconding this vote of thanks, dilated at some length upon the importance of the views developed by Mr. Hutchinson, more particularly in their relation to the progress of medical science in the path of *exact investigation*.

The members and their friends dined together after the meeting, at the Kings Head; Mr. Crowfoot took the chair, and was supported on his right by J. G. Crosse, Esq., Dr. Owen, the respected Vicar of Beccles, &c. &c.; and on his left by Dr. Ranking, Mr. Hutchinson, W. Sharpin, Esq., &c. The duties of the Vice-chair were ably fulfilled by W. H. Davey, Esq.

SHEFFIELD MEDICAL SOCIETY.

Sixth Session.—Fifteenth Meeting, April 15th, 1847.

The PRESIDENT in the Chair.

FATTY LIVER AND PANCREAS: BILIARY CALCULUS.

Dr. Branson exhibited a portion of fatty liver and pancreas, and a large gall-stone the size of a pigeon's egg, which were presented by Dr. Scholfield, of Doncaster, to the Infirmary Museum. The specimens were taken from a gentleman, aged 52, who for three months and upwards had suffered from ascites, accompanied by great emaciation of the face and extremities, a rapid and weak pulse, and purpuric spots on the legs. The patient never had jaundice nor symptoms of gall-stone, and the fæces were natural. The parietes of the abdomen were loaded with fat, and the cavity of the peritoneum contained two gallons of bloody serum; there was also much fat on the abdominal viscera. The liver and pancreas were both fatty, and the convex surface of the liver was adherent to the diaphragm; the gall-bladder was distended with dark green inspissated bile, of the consistence of thick treacle. One large calculus, the size of a pigeon's egg, was found lying in the fundus, but movable; it had formed a kind of *cul de sac* near the cervix, which allowed it to float backwards and forwards without obstructing the duct. The kidneys were healthy, and the spleen large and firm. The heart was small and pale, with fat upon it. The lungs were healthy, with the exception of two or three tubercles seen through the pleura near their apices.

SCIRRHOMA.

Mr. H. Jackson exhibited the heart, a portion of the left lung, the kidneys, and portions of three ribs, to which externally a tumour was attached, removed from a farm labourer, aged 65. He was admitted into the Infirmary in consequence of the tumour, which was situated on the right side over the angles of the eighth, ninth, and tenth ribs. His appearance indicated great emaciation. The tumour, which had existed for two or three years, had given him pain for some time back, and had gradually increased until it reached the size of half a large orange. It presented an irregular surface to the touch, and the man's countenance was indicative of the anxious expression so generally seen in malignant disease. He in a short time after admission presented bronchitic symptoms, and gradually sank. On examination the tumour was found to be scirrhous, and a portion of the ninth rib was absorbed. There was a very large scirrhous mass in the right lobe of the liver, near its margin. The left renal capsule was much enlarged and scirrhous. The kidneys presented numerous serous vesicles. In the apex of the left lung, a scirrhous body, about the size of a nutmeg, was found, and another on the apex of the heart, which was large, but otherwise healthy.

OBSTRUCTION OF THE BOWELS.

Mr. H. Jackson read the following case communicated by Mr. Favell, who was unable to be present.

On the night of December 11, 1846, Mr. Favell was called to see a child, of the age of six months, said to be "bleeding at the seat," and on his arrival found the parents in great alarm. They informed him that the mother awoke to suckle the child, and found its napkin bloody, accompanied with a good deal of straining and effort to evacuate the bowels. It had previously been quite well, and on the preceding day had passed two or three natural and copious stools. On examination, he found that the bleeding and straining had quite ceased, and that the quantity of blood passed was very trifling, not more than a teaspoonful altogether. A dose of laudanum, with nitric acid, was administered and a dose of castor oil was directed to be given in three or four hours. The child continued in much the same state all day, and there having been no evacuation, the castor oil was repeated, and a clyster was given. On the 12th, in every respect much the same; a small quantity of bloody serous-looking fluid passed at times, with much straining, but there was

no natural stool. Castor oil was repeated, and an injection administered every two hours. Fearing that there might be some obstruction in the rectum from hardened fæces, although the motions had been copious and regular up to the night of the bleeding, the finger was passed up, and detected a long solid tumour, projecting down the centre of the gut. No impression whatever could be made on the projecting substance, though the finger could be passed completely and easily round it, excepting at the base. It felt like a small sausage, perfectly smooth, glutinous, and inodorous. On withdrawing the finger it was tinged with a little bloody serum that had been passing for two days. The prognosis was unfavourable. What could the disease be? Obstruction of the bowels undoubtedly. But was it intussusception, fungous growth, or what? Certainly it was not hardened fæces. On the 13th every thing the same, except that the general aspect of the infant was considerably deteriorated. For the next three or four days there was no material change, the patient gradually sinking. No alvine evacuation; the same bloody oozing; frequent vomiting; tumid belly; pulse and countenance sinking. Sherry and beef-tea were administered every hour, alternately, as he was quite unable to take the breast, and the Acid. Hydrocyanic. [!] cum Tinctura Opii continued every four hours, to keep the stomach sufficiently quiet to take nutriment, which was otherwise immediately rejected. Mr. Overend saw the child in consultation, and was of opinion that the tumour was caused by invagination of the bowel, and recommended the continuance of the plan, life apparently rapidly ebbing. He was seen regularly night and morning, and to the surprise of all it appeared as if he could not or would not die. The tumour remained the same, except that Mr. Favell thought he felt a little ruggedness or inequality at the extremity, resembling the margin of an ulcer. The belly became very large, and tympanitic, almost to bursting, and the whole frame attenuated to a skeleton; the eyes glassy; features livid, and occasional convulsions. He was most devotedly nursed; beef-tea and wine were most diligently administered; the belly was rubbed with castor oil four times a day, and a little warm water injected. On the 23rd, twelve days after the commencement, about a table-spoonful of liquid fæces passed, which, though a favourable omen, produced no present relief. In two days after a firm consistent motion was passed, and from that period the child gradually, very gradually, recovered. That was on the 24th of December, and now on the 17th of March, he only occasionally suffers from constipation and straining, which are obviated by mild aperients and injections, and he has become a fine, stout, strong, little fellow, with no other ailment than that above named.

The inquiry that naturally suggests itself is,—what was the nature of the long tumour in the rectum? Some may say hardened fæces, and when they were passed all went on right. But the tumour was small in circumference, not filling the rectum, the finger being passed freely round it; smooth, unyielding, and inodorous. If intussusception, is it likely that the prolapsed colon should have ulcerated through, suffered the retained fæces to pass, and then have healed kindly, leaving so little trace behind? For two or three weeks after the evacuation took place the belly remained tumid and tense, and the sickness very distressing. For three weeks he was supported entirely on beef-tea and wine, the mother retaining her milk by artificial means, and this he now takes freely and beneficially. Independently of the inability to take the breast, when the milk was administered by a spoon, it was immediately rejected. Every one conversant with diseases of children must have remarked the great efforts exhibited by nature for their recovery when not interrupted; life is soon extinguished in these tender plants by bold practice, while by closely following nature, the flickering spark of existence may be often fanned into a healthy flame. In this case the child was never left by one or other of his parents night or day, and had he been in less kindly hands, he must inevitably have died.

POISONING BY TINCTURE OF IODINE.

Mr. Jackson then read the following particulars communicated to the Society by Mr. H. Smith:—

Mr. J. H. Smith was requested to see, on the 12th of December, 1846, a woman aged 31, of drunken dissolute habits, and in great want, suffering from erysipelas of the face, accompanied by some degree of depression of the vital powers, which was relieved by the exhibition of some wine and water and additional bed-clothing. The bowels being confined, some compound decoction of aloes was given, and the tincture of iodine ordered to be applied to the face with a brush. The quantity of the tincture sent was one ounce, containing rather less than one drachm of iodine in one ounce of spirit. This tincture the patient drank instead of the mixture, and immediately after exclaimed that she had swallowed poison. The tincture was given by a half intoxicated man, for the mixture, although both bottles were marked with printed labels. Mr. Smith visited her very shortly afterwards, and found her complaining of a violent burning pain in the throat and stomach, followed by retching and slight vomiting; pulse rapid and full; eyes prominent and suffused. Mr. Smith immediately made her drink freely of a solution of bicarbonate of potash in warm water, which he thought might be beneficial by converting the iodine into iodide of potassium, which would be less irritating, and also by acting as an emetic. Copious vomiting quickly followed, but without any relief to the symptoms. Some linseed tea was then administered, and ordered to be taken freely. When visited in a few hours the symptoms continued unabated. Next morning the pain was considerably relieved, but symptoms of depression succeeded, and she died the day following, about sixty hours after taking the poison. There was no post-mortem examination, as the coroner did not require it and the friends would not allow it.

Mr. Smith then referred to cases from Christison and some French authors, and concluded by asking what might be considered as an antidote to iodine.

Mr. Jackson then made a number of remarks and detailed a series of cases from Christison, Gardner, and

some others, and stated that in the returns of deaths from poisons in the years 1837-8, among the 541 cases, not one was mentioned of iodine.

Mr. Smith then detailed some very interesting cases of the bad effects resulting when iodine had been exhibited carelessly for a lengthened period, and he believed that this iodism was frequently the cause of very serious and fatal results. In these cases there was headache, dizziness, &c., which were relieved by vomiting the iodine, and giving brisk aperients.

Sixth Session.—Sixteenth Meeting, April 29, 1847.

The PRESIDENT in the chair.

At this, the concluding meeting of the Session, after the ordinary business of the meeting had been transacted, the Secretary read a very interesting and elaborate retrospect of the scientific business of the past Session, in which he reviewed the most important cases and preparations which had been brought before the Society, and congratulated the members on their successful efforts in making the meetings agreeable and instructive; and also on the increase in the number of specimens which had been exhibited. After the usual vote of thanks the meeting was adjourned.

GENERAL MEDICAL ANNUITY FUND.

A meeting of the subscribers and friends of the General Medical Annuity Fund, convened by circular and advertisement, was held on Tuesday, the 1st of June, at the George Hotel, Northampton, Edward Daniell, Esq., of Newport Pagnell, in the Chair.

The Chairman stated that it was unnecessary for him to enter at length into the object of that Meeting, nor would he detain them now by any observation either upon the value or importance of the institution sought to be established, as he had already propounded his views so fully to the medical world, and if he could judge from the vast pile of letters upon the table, from the repeated and repeated assurances he had received from gentlemen residing in all parts of the kingdom, the necessity for a provision for our decayed brethren, and for widows and orphans, ceased to be problematical. Indeed such an institution was loudly called for, and he had no hesitation in saying that it would be a disgrace to the profession, if they allowed either apathy or neglect to prevent the establishment of a General Fund for such holy purposes. He had been told by a music master that day that an institution did exist for professionals of that order, and all knew that the mechanics who were connected with the order of persons called "Odd Fellows," had made provision for their widows and children. He heartily hoped a grand effort would be made, but he would detain them no longer, otherwise he should anticipate the Secretary's Report; he should therefore at once call upon the Secretary to read

THE REPORT.

The object of the General Medical Annuity Fund, is to secure for the superannuated members of the medical profession, and for their widows and orphans, such assistance as may be required, which shall in some measure relieve their necessities. The most limited observer cannot fail to have seen many instances of necessity and distress in the families of the profession, instances which have arisen from the precarious nature of the profession, from limited sources as to returns and capital, from the expense of purchasing an insurance, and from the uncertainty of their lives. It is a fact well ascertained, that fewer medical men out of a thousand arrive at the age of sixty-six, than from the members of any other profession. It was various observations of this kind which induced Mr. Daniell to be anxious in establishing a Society, which should raise a fund by a limited annual subscription from the many, which should meet the cases of necessity and distress experienced by the few. It will be my duty to detail to you the steps which have been taken to accomplish this most desirable object, to state to you some of the reasons upon which the calculations of this Society have been based, and to suggest for the consideration of gentlemen present, such hints as may, I trust, assist you in your deliberations of this day, and enable you to lay the foundations of a Society in such a manner, and on so wide a basis, as to secure for itself the confidence and sympathy of the medical profession throughout the kingdom of Great Britain. It was about the month of May, 1845, when Mr. Daniell first proposed the establishment of this Society, in a letter which he addressed to Dr. Streeten, as the Secretary of the Provincial Medical and Surgical Association, and the result of that correspondence was, that at the Annual Meeting of that Association, which was held at Sheffield in the month of July of that same year, Mr. Daniell submitted his proposition for the establishment of an Annuity Fund, and it was proposed by him and seconded by Dr. Robertson, "That a Committee of the Association be appointed immediately, to consider, discuss, and arrange the best preliminary steps for the stablishment of a self-supporting institution, connected with the Provincial Medical and Surgical Association, to be called an Annuity Fund, for decayed Members of the Association, and for the widows and orphans of Members." On the next day the following gentlemen were announced as forming the Committee on Mr. Daniell's proposition for an Annuity Fund:—Drs. Robertson and Kerr; and Messrs. Terry and Faircloth, of Northampton; Dr. Mackness of Hastings; and Messrs. Ceely, of Aylesbury; Rumsey, of Gloucester; Jackson, of Sheffield; Garlick, of Leeds; Haxworthy, of Sheffield; Greenwood, of Horton; Paget, of Leicester; Crosse, of Norwich; and Appleton, of Hitchin.

In the meantime the attention of many gentlemen having been arrested by Mr. Daniell's proposition, a variety of suggestions were made to him by parties interested in such an undertaking, and the substance of this correspondence was laid before the meeting of the Committee, which met at Dr. Robertson's, at Northampton, on Monday, the 8th day of September, 1845, when the rules and regulations were determined upon; but as those minutes have been very freely circulated, it may not be necessary on this occasion to read that paper. An adjourned meeting of the Committee was again held at Dr. Robertson's on Thursday, the 15th day of January, 1846; at this meeting no

formal business was transacted, but a long discussion took place upon the principle upon which the Society was based, and as to the mode in which its operations could be best conducted. For some months the attention of your Secretary was busily occupied in attending to the business of the Society and in conducting its extensive correspondence; and in company with Mr. Daniell, he attended the Annual Meeting of the Provincial Medical and Surgical Association, held at Norwich, on the 19th and 20th days of August last, when Mr. Daniell presented a report at one of the meetings of the Association. Having read the report, Mr. Daniell addressed the meeting upon the subject, and moved the proposition—"That the conduct of the committee appointed at Sheffield for the carrying out the project of a General Medical Annuity Fund, be approved by this annual meeting of the Provincial Medical and Surgical Association, and that the Fund be considered as an integral part of this Association," and the motion having been seconded by Dr. Hunter, of Lynn Regis, a discussion arose thereupon. The meeting having been addressed by Drs. W. Conolly, Chambers, and Forbes, and by Messrs. Kitchen, Daniell, and the President, Dr. Soulby moved as an amendment "That the Annuity Fund be not considered an object of this Association," which was declared carried, and the original motion consequently lost. This decision of the meeting at Norwich deprived the Annuity Fund of that home which its projector had sought for it, and it became Mr. Daniell either to abandon his proposal or seek the establishment of the Annuity Fund, as an independent and distinct Society. After long consideration he addressed a letter to each of those gentlemen who had subscribed to his fund, as well as to all others who had intimated to him their wish for the establishment of the society. The answers with which Mr. Daniell has been favoured from a large number of his correspondents, have encouraged, if we may not even say justified him, in calling this present meeting of the friends and the supporters of the General Medical Annuity Fund, and if I have not already, Sir, wearied the attention of yourself and the meeting, permit me to travel somewhat out of the beaten track of an ordinary report, and deferentially to offer for the consideration of this meeting those suggestions which have occurred to my own mind as relating to the business of the day, and although I cannot hope that on all points my views will be found to correspond with your own, yet I shall be content, and my end will be answered, if any hint of mine should facilitate your labours, or happily form a channel in which your deliberations may flow.

The question of to-day, then, turns upon this hinge, shall Mr. Daniell's project be abandoned, or shall this meeting take such steps as shall lead to its triumphal,—its final establishment. I can hardly imagine that you can be disposed to abandon this Society, formed as it has been under such auspices, and calculated as it is to meet long acknowledged wants,—that all the letters written, all the statements published, all the services rendered, all the expression of interest and sympathy which the Society has called forth, should all,—all become utterly void and useless, and that we can return to our homes, and there for ever banish from our memories the recollection that the Institution has had an existence? Surely not. Here, then, comes the question. Is the assistance already rendered, and the assistance already promised, sufficient to justify further movements in the establishment of this Society? To assist you in deciding this question, let us turn and look to the past, and we learn from the statement which I now, Sir, lay before you, that up to last Saturday evening seventy-five gentlemen have subscribed to this Fund the sum of £190, together with donations; and that forty gentlemen have not only promised to become subscribers, but have offered their services as honorary secretaries for their own immediate localities,—a service, the value of which cannot be too highly estimated, as the interest which these gentlemen will feel in the welfare and progress of the Society, will tend to its ultimate success. Under date of November the 15th, 1845, Dr. Jephson, of Leamington, has promised Mr. Daniell, that if he succeeds completely in establishing the Fund, he will give one hundred guineas towards its support. Let me now proceed to suggest to you some hints as to the alterations which are required in the rules and regulations of the Society.

First, then, as to the officers; these, in some cases, will require a change in their names, and I am sure that you will permit me to suggest that our truly excellent Treasurer should be appointed your perpetual President, and that your Treasurer should be "The Northamptonshire Union Bank." The trustees should be gentlemen who are subscribers to the Fund, and you will probably request Dr. Robertson; and Mr. Paget, of Leicester; with Mr. Terry, of Northampton; and Dr. Symonds, of Bristol; to act as such. An addition will be required in the number of elective managers; and in addition to Mr. Faircloth, of Newmarket; Mr. Appleton, of Hitchin; Mr. Elkington, of Birmingham; Dr. Cowan, of Reading; and Mr. Peter Martin, of Reigate; the names of Mr. Rogers, of Newport Pagnell; Mr. Parker, of Woburn; Dr. Roberts, of Bangor; Dr. Alloway, of Clonaslie; and Mr. Lambert, of Sowersby. You will probably feel it right to continue the rules that no annuity should be granted to a subscriber unless he has paid his subscription for five successive years, as an adherence to this rule will act as a check against any improper application, and the interest of that capital will not only supply a resource for the payment of the current expenses, but will enable the Directors to make up those occasional variations in the funds of a society which are to be naturally expected in an institution of this kind. Some alteration will probably appear to you as necessary in the rate, as well as in the mode, of the payment of the annuities, and it might greatly conduce to the interests of the Society to pay four annuities, of twenty-four pounds each, to either superannuated members, or to their widows, or to their orphans, as the case may be, for every one hundred subscribers. If there should not be more applicants than there are annuities to grant, then, as a matter of course, the officers of the Institution will decide upon the applicants; while, on the other hand, should it prove otherwise, then the Secretary would transmit a list of the applicants to each subscriber, and the largest number of votes would secure the annuity. It will also be advisable to determine whether it would not be desirable that the annual meetings of the Society should be held in different towns of the kingdom, where gentlemen may reside who feel an interest in the prosperity of the Institution. These suggestions,

together with other alterations, which will probably be resolved on at this meeting, will be required to be worked in mosaic into the present rules and regulations; but as it will be impossible to-day to give that calm attention to the drawing up of the amended rules as such a service requires, you will probably see fit to determine the general plan of operation, leaving the details to be carried out under the direction of a small sub-committee; and in the meantime it may be thought advisable to transmit this statement of your affairs to each subscriber to the fund.

I have the satisfaction of announcing that I have had an interview with Mr. Neison, the author of "Vital Statistics," respecting the Society; and as soon as our rules are matured, he has engaged to examine into their nature and bearing, and he will then be able to determine whether a nominal entrance fee, which should be regulated by the age of the subscriber, could be added to our rules, so that the Society should have the benefit of being enrolled under the Act of Parliament, made and provided for that purpose.

It is impossible for me, Sir, within the limits of this report, to detail to the meeting the various suggestions which have been made to Mr. Daniell and myself, as to do so would be only to peruse the pile of letters now lying upon the table. Suffice it to say, that many of the hints have proved of essential service to us in our labours, while, on the other hand, the tendency, though, perhaps, not the actual design, of the writers of others, would be to convert our simple but comprehensive scheme into an ordinary insurance company. But it cannot too often be repeated, that the design of our Institution is to help that class who have not had the power or the disposition to avail themselves of the advantages of Life Insurance Companies. I think that I may be permitted to say, that in conducting the correspondence of this young, but I trust, rising Society, I have spared no labour to detail its objects and its advantages, neither has this been an easy task, for, in a great measure, our Society is *sui generis*, but not completely so, as there are other Societies in the kingdom established on somewhat similar principles, but merely local in their operations. Indeed we may take as an illustration of our plan, in its development and character, the process adopted in the management of the Art Union of London. It may easily be supposed, that of the thousands who contribute their annual guineas to that Society, some do so with a desire to assist the cultivating of the fine arts, and some with the remote prospect of gaining a prize. Just so it may prove with us; some may contribute their annual guinea upon the principles of the purest philanthropy, some from a pure sense of duty, and some from a remote contingency of receiving its assistance, while none would refuse, or become degraded, by obtaining the prize of an annuity, if the chances of this mortal life rendered such assistance requisite. I trust that I may be permitted to close this tedious report by the expression of my wish, that as that society, from its small beginnings has become a National Society, so may our infant cause come to the stature of a man, and by its manly strength, aid every needy member of the medical profession, cheering the widowed heart, and securing to the orphan that comfort and assistance which the visitation of Almighty God may have laid upon him.

H. L. Smith, Esq., of Southam, observed that he would not on any account propose anything likely in any way to obstruct the establishment of Mr. Daniell's fund, which he thought admirable; but it had occurred to him that we should even go beyond it, and provide homes for widows and orphans. The expenses of renting a house was often of serious consequence to a poor widow. He should like to see homes for widows and orphans in every county town in England, and conceived that the nobility, clergy, and gentry, would be ready to assist in such a work.

The chairman observed that such a thought had struck him, and he believed, in one of his letters (he rather thought to Mr. Estlin, of Bristol,) he had thrown out the idea, but the funds subscribed to this Institution were for an expressed and understood purpose, and could not be diverted from that purpose; he was delighted, however, with Mr. Smith's suggestion, and trusted a time would come when such a project might be entertained.

Dr. Gardner, of London, congratulated Mr. Daniell as to the present prospects of the General Medical Annuity Fund. He felt assured that it must succeed. He admired its simplicity. The calculations could not be otherwise than correct, as four annuities in every hundred subscribers would clearly yield £25 each; and the capital so accumulated in the five years which elapse before annuities would be granted, would form a fund to fall back upon when necessary. He highly approved of the provision. He would be delighted to offer his services as Honorary Local Secretary, and pledged himself to exert all the energy he possessed in the execution of his office.

Wm. Lambert, Esq., of Sowersby, Yorkshire, could not but say that he felt disappointed, for when he first read Mr. Daniell's proposition, he thought the whole medical world would rise simultaneously to support such a project; it appears, however, he was mistaken; still there was enough to encourage perseverance, and he trusted Mr. Daniell would relax nothing, either in spirit or energy, to complete the noble work he had begun. He should therefore propose "that Mr. Daniell's plan for a Medical Annuity Fund be proceeded with, and that the report and suggestions of the Secretary be adopted." He felt the utmost confidence both in the projector and Secretary of the Fund.

Dr. Gardner seconded the resolution, which was carried unanimously.

H. L. Smith, Esq., observed that there could be no hesitation in carrying out the project, for it was a capital beginning. He then gave instances of very flourishing institutions, the commencement of which were much inferior to this,—nay, some, where the projector had been both Chairman, Secretary, and Committee.

Thomas Parker, Esq., of Woburn, asked when annuities would be granted.

The Secretary replied, clearly even with our present numbers, four or six would be granted at the end of five years.

A discussion ensued upon Dr. Shirley Palmer's project, as detailed in the *Medical Times*, when the Secretary demonstrated to Dr. Palmer the utter impracticability of his plan, on his present calculations, drawn from the statistical tables.

The meeting was then addressed by Drs. Robertson and Pritchard, of Northampton; R. Martin, Esq., of

Holbrook, Suffolk; Thomas Parker, Esq., of Woburn; &c., and the conclusion was, "That the General Medical Annuity fund proposed by Mr. Daniell be considered established; that the Honorary Local Secretaries be instructed in their duties, and supplied with proper documents, and that a Sub-Committee be appointed to meet at Newport Pagnell for the reorganization of the 'rules,' and the final adjustment of all matters for the working of the same. That the Sub-Committee be composed of the following gentlemen:—Dr. Pritchard, of Northampton; Edward Daniell, Esq., Newport Pagnell; John Rogers, Esq., Newport Pagnell; H. L. Smith, Esq., Southam, Warwickshire; Dr. Barker, Bedford; Thomas Parker, Esq., Woburn; J. G. Leete, Esq., Thrapstone.

Mr. Daniell having read Dr. Jephson's letter under date of the 15th of November, 1845, announcing his intention of presenting a donation of one hundred guineas so soon as the Society was formally established, it was resolved, "That the grateful thanks of this meeting be given to Dr. Jephson for the promise of his very handsome donation of one hundred guineas on the establishment of the Society, and the Secretary do inform the Doctor of the formal establishment of the General Medical Annuity Fund." It was further resolved, "That the next general and annual meeting be held at Leamington, at such time as may suit Dr. Jephson's convenience, and that he be requested to preside at the same."

A Financial Report, List of Members, and Honorary Local Secretaries, with new Rules and Regulations, will be published after the 30th of June, the conclusion of the second year. Gentlemen desirous of acting as Local Secretaries will please to signify their intention to Mr. Joseph Staines, Secretary, Newport Pagnell, Bucks.

[We are requested to state that Dr. Jephson has remitted to Mr. Staines, the Secretary to the Fund, his munificent donation of one hundred guineas.]

General Retrospect.

PRACTICAL MEDICINE.

TREATMENT OF FEVER BY COLD WATER.

Dr. Jacques (de Lure,) gives a statistical account of an epidemic of typhoid fever, several cases of which he cured by the external and internal use of cold water. The total number of cases enumerated amounts to 492; of these 143 were treated in the manner alluded to, and 349 in various ways, some by purgatives, others by mercury, &c., according to the idea of the practitioner in attendance. Of the 349 cases thus treated, 1 in 4 died; while of the 193 treated by cold water, the deaths were only 1 in 15.—*Bulletin de la Societié de Med. de Bezançon*, 1846, No. 2.

TREATMENT OF ERYSIPELAS BY LINEAR BLISTERS.

Erysipelas is not a severe disease when it is confined to a limited part of the body; it is generally its extension, either superficially or in depth that produces the danger. Attempts have been long made to counteract this tendency to extension, by the nitrate of silver, solutions of sulphate of iron, &c. These methods have for the most part failed. M. Piorry affirms that he has discovered a means of effecting the desired limitation of inflammatory action with great certainty, by applying at the commencement of the disease, narrow blisters around the entire circumference of the inflamed skin, at a distance of an inch or two from its border. He states that the erysipelatous blush soon reaches the inflammation arising from the blister, but in more than twenty cases has not gone beyond it.—*Journal de Pharmacie.*

SURGERY.

CONTRACTION OF THE ŒSOPHAGUS CURED BY TEMPORARY DILATATION.

A man swallowed by mistake a quantity of dilute nitric acid; a considerable portion of it was rejected by vomiting, and the specific poisonous effects of the acid were not produced; but the pharynx and the superior part of the œsophagus were denuded of epithelium, and a superficial ulceration resulted; suppuration supervened, this was followed by cicatrization, and a considerable coarctation of the tube. An œsophagus bougie, about the size of the little finger, could be passed to the stomach, but the contraction was sufficient to prevent deglutition, and was still increasing. Fearing that the canal, left to itself, would become the seat of a permanent contraction, M. Blandin acted upon the same principle as in strictures of the urethra, by methodical dilatation, intending to associate with it cauterization, if necessary.

Some elastic œsophagus sounds were employed; after passing the stricture they were allowed to remain ten or fifteen minutes; the operation was repeated twice daily, progressively increasing their size, and in three weeks the patient was cured.—*Journal de Méd. et de Chirurgie*, Fevr., 1847.

TREATMENT OF FISSURE OF THE ANUS BY CAUTERIZATION.

M. Herpin relates two cases of this painful malady, which were cured by a single application of the nitrate of silver in substance. In one case, the fissure being high up, it was necessary to use the speculum ani.—*Encyclograph des Sciences Médicales*, Mars, 1847.

PROGNOSIS OF ILIAC ABSCESS.

Dupuytren did not consider the prognosis in iliac abscess very unfavourable. Grisolle is of a different opinion, for of seventy-three cases twenty were fatal and eleven serious. Of puerperal women so affected, seven died out of seventeen. Of all descriptions of this abscess, the stercoral abscess being always accompanied by gangrene, is incomparably the most serious, for of such cases five in seven were either fatal or resulted in artificial anus. Gangrene is but seldom observed in connection with the more superficial abscess, unless where this succeeds perforative ulceration or mortification of the cæcum or of its appendix, giving rise to extravasation of fæcal matters into the cellular tissue of the vicinity. If, on the contrary, the inflammation be seated under the fascia iliaca, this may then produce a true strangulation of the inflamed parts; and it is common enough to find in these subaponeuritic abscesses, the fibres of the iliac muscle blackened, softened, and exhaling a fœtid odour;

and after an incision is made into them, gas, pus, and portions of mortified cellular tissue, muscle and tendon, escape from the opening. In such cases death is almost certain to ensue.—*Dublin Quarterly Journal*, May, 1847, p. 535.

TREACLE AS A DRESSING TO BURNS.

Mr. Bulley has published a series of cases illustrative of the advantages derived from the application of treacle and water as a dressing to burns. The dressing is applied at a temperature of 98° by means of lint thoroughly soaked with it, and renewed night and morning. The action of this remedy, as far as Mr. Bulley has been able to observe, is directly sedative, and its first effects appear to be those of lulling the pain, and moderating the inflammation. It also appears to have a tendency to retard putrefactive decomposition, as is clearly indicated by the absence of fœtor in the cases in which it is used. This was remarked particularly in an instance in which a burn of the abdomen occupied a surface of 270 square inches. Treacle appears to have been also used by Dr. Greenhow, of Shields, for the same purpose, as long since as 1838.—*Medical Times*, May 22.

DRESSING OF BLISTERS.

Dr. M'cLagan states that he has for some time substituted dry cotton in the dressing of blisters, for all other applications. When he orders a blister, he directs that after it has been applied for a certain time, it shall be removed, and the part covered for two hours with a poultice. The effect of this is to render the vesication more complete, and to moderate the tenderness of the blistered part. The blister is then to be cut, and a thick layer of cotton wadding applied. If this after a few hours is soaked with the discharge, as much as can be removed without disturbing the loose epidermis, should be taken away, and the whole again covered with fresh cotton. By this means the author states that the punishment of a blister is greatly lessened.—*Monthly Journal of Medical Science*, May, 1847.

MIDWIFERY.

SPONTANEOUS EVOLUTION.

Dr. Simpson, in taking part in a discussion on the subject of spontaneous evolution, terminated his remarks with the following general deductions :—

1. That spontaneous evolution in transverse presentations was not so rare as some authors averred, and that it would probably occur oftener if appropriate measures were not applied.

2. That under some circumstances, arm and shoulder cases should probably be left to be expelled by the mechanism of spontaneous evolution, assisting, if necessary, the mechanism by art.

3. That this ought to be the practice, if in an arm or shoulder case, the chest and trunk of the child be already thrust down into the cavity of the pelvis; for to turn under such a complication, and with that object to push back the body of the child into the cavity of the contracted uterus, would necessitate the re-dilatation of the uterus, and hence, in all probability, produce a rupture of its coats.

4. That if the process of spontaneous evolution failed, two operations had been recommended to effect delivery,—viz., evisceration and decapitation.

5. That evisceration was only applicable to cases of *pelvic* spontaneous evolution; and decapitation only to *cephalic* evolution.

6. Of course in all common transverse presentations seen before the body of the child was thrust into the cavity of the pelvis, *turning* was the proper practice.

7. A child of common size could never be doubled up and thrust into the cavity of the pelvis unless the pelvis were capacious; and hence, when spontaneous evolution is found in an *advanced* stage, it affords presumptive evidence that the pelvis is of size to allow of its completion.—*Monthly Journal*, May, 1847.

TREATMENT OF PLACENTA PRÆVIA.

In commenting upon a fatal case of hæmorrhage from placenta prævia, in which some indecision appears to have been exhibited as to the treatment, Dr. Radford thus briefly states his views of the course to be adopted under the various circumstances of the case:—

When the vital powers are thus depressed, we ought not to have recourse to any operation by which they are farther lowered. Under these circumstances, then, delivery ought not to be had recourse to; first, because there is invariably an increased exhaustion produced by the excitement arising from the efforts of the practitioner, which are made to dilate the os and cervix uteri, and to extract the child; secondly, because an increased loss of blood inevitably takes place in cases of placenta prævia, during the operation; and thirdly, because syncope, or a tendency to it, is induced, by suddenly emptying the uterus.

Although I have the greatest confidence in the use of the plug, at an early period, in cases of placenta prævia, when delivery cannot and ought not to be performed, in order to save blood during the time which elapses whilst the preparatory changes take place in the os and cervix uteri, so that this operation can then be safely undertaken; it cannot be denied that it becomes a dangerous expedient in cases of extreme exhaustion, so long as the placenta is only partially separated from the os or cervix uteri.

The secale cornutum is totally inapplicable to cases of flooding where the energies of the woman are so low, because it tends farther to depress the nervous system.

The complete detachment of the placenta is a practice which I have already advocated in such cases as the one under consideration; and if this plan had been trusted to, without proceeding to the extraction of the child, there is no doubt in my mind that a better chance to rally would have been given to the patient. What could be the object of first completely detaching the placenta, and then delivering the child? The complete detachment of the placenta has been recommended by me to supersede the necessity of the hazardous operation of delivery in these cases of exhaustion.

Galvanism is the agent to be employed in these cases of nervous depression from loss of blood; it not only rouses the energies of the uterus, thereby enabling

the practitioner to deliver when timely required, without, at the same time, making the least demand upon the already exhausted powers, which is the case when we have recourse to the manual operation of version and extraction of the child, but it is also a powerful general stimulant, and raises the power and action of the heart.

This happy result I have observed in several cases, and the power in question gives to this agent a great superiority over the secale cornutum in such cases.

Dr. Radford, in conclusion, reiterates his expression of confidence in the power of galvanism in uterine hæmorrhage, and promises an early publication of nnmerous cases of its successful application.—*Lancet*, December 5, 1846.—["Half-yearly Abstract," vol. V.]

Dr. Tyler concludes an essay on this subject as follows:—

1. In cases of partial presentation the practitioner should avail himself of the earliest opportunity to rupture the membranes, and evacuate the uterus of its fluid contents.

2. In the same class of cases, after the escape of the liquor amnii, should vigorous uterine action not ensue he should encourage this action by friction over the fundus uteri, the application of a binder, ergot, or galvanism.

3. In complete placental presentation, when the os uteri is rigid and undilated, never attempt to extract the placenta through it in that state, but plug the vagina with a soft sponge dipped in cold vinegar and water.

4. As soon as the os uteri is sufficiently dilated, to turn.

5. Should there be no doubt of the child being dead, and the head presents, it may be delivered by the perforator and crotchet.

The author, thinking that the cessation of bleeding after extraction of the placenta is due to the evacuation of the fluid contents of the uterus, proposes in some cases to pass a catheter through the placenta, and thus draw off the liquor amnii.—*Dubl. Quart. Journ.*, May, 1847.

MEDICAL JURISPRUDENCE.

METHOD OF DETERMINING THE PRESENCE OF MORPHINE IN CASES OF POISONING.

M. Thenard adopts and recommends the following proceeding:—The suspected matter, if solid, is carefully washed in distilled water, acidulated with acetic acid; if fluid, it is diluted with the same. The solution is then to be warmed and filtered, and afterwards evaporated to dryness. The residue is next treated with boiling alcohol, which separates the animal matter. To the alcoholic solution previously filtered, tincture of nut-galls is then added, and maceration is continued for fifteen days, when the morphine is precipitated in combination with the tannin. The solution being again filtered, it is diluted with distilled water, and a solution of gelatin is added in excess, for the purpose of decomposing the tannate of morphine. The morphine having yielded to the gelatin, the tannin with which it was united, is dissolved by the alcohol; filtration separates the tannin and the gelatin, and by evaporation the alcohol is dissipated, and the morphine remains, which may be recognized by the usual re-agents.—*Journal de Chimie et de Toxicologie.*

REMUNERATION OF MEDICAL PRACTITIONERS IN IRELAND FOR PUBLIC SERVICES.

The subjoined memorial, signed by 1050 physicians and surgeons, was presented to the Lord Lieutenant of Ireland on the 22nd of this month:—

To His Excellency George William Frederick Earl of Clarendon, Lord Lieutenant General and General Governor of Ireland.

MAY IT PLEASE YOUR EXCELLENCY,

We, the undersigned Physicians and Surgeons in Ireland, beg leave respectfully to represent to your Excellency, that the members of the Medical Profession in Ireland are frequently called upon to perform public professional duties for the benefit of the Community at large, and that the zeal and efficiency with which those duties are discharged, together with their importance to the public welfare, eminently entitle that Profession to the protection and support of the Government.

It is right to draw your Excellency's attention to the fact, that Statistical Returns for upwards of 25 years, exhibit a fearful mortality from Fever among the Medical men of this country, and recent events have shown that from the same cause we have to deplore the loss of many of the best and most efficient Practitioners, who contracted Typhus Fever in the discharge of their duties among the Sick Poor.

We feel that the members of the Medical Profession have reason to complain that they sustain hardship and injustice when employed in the Public Service, as in some instances from the imperfection of existing laws, Medical Practitioners are denied any remuneration whatever for such services, or are constrained to accept sums utterly disproportionate to the duties they are compelled to discharge; while in other cases, where the amount of remuneration is left to the discretion of Government, or to the award of Officers in Public Departments, it is often unjustly and degradingly inadequate.

We most strongly but respectfully protest against the amount of remuneration offered by the Board of Health to Physicians and Surgeons for attending Fever Hospitals during the present epidemic; as, in some instances, Five Shillings per day have been offered by the Board of Health for the discharge of that onerous, responsible, and dangerous duty.

We need not enlarge on the importance and value of the services rendered to the country by the Medical Attendants of Fever Hospitals, neither does it seem necessary to do more than suggest that insufficient and degrading remuneration for professional services cannot fail to injuriously affect the public interests; and we

confidently trust that your Excellency will take such steps as may, in your Excellency's wisdom, seem fit to remove those grievances, and cause such remuneration to be awarded to the Medical Officers of Fever Hospitals and Fever Districts, as may be commensurate with the great value and importance of the duties required of them.

Medical Intelligence.

MEDICAL REGISTRATION BILL.

HOUSE OF COMMONS.

On Monday, the 21st inst., Mr. Wakley withdrew the Medical Registration Bill for this session, stating at the same time that should he occupy a seat in the next Parliament, it was his intention to give notice of a motion in the first week of the session for the re-appointment of the Medical Committee.

It is stated that in a few days, the evidence which has been given by the five witnesses from the College of Physicians against the system of registration proposed in the Bill, will be printed, and in the hands of the profession, and that the evidence yet to be taken will also be printed.

MANCHESTER ROYAL INFIRMARY.

At the late meeting of the Trustees of the Manchester Royal Infirmary, it was resolved to appoint three Dispensary Surgeons in connection with the Institution, to take charge of the out-patients of the three Senior surgeons, and of all the surgical home-patients. Mr. W. Smith, Mr. A. W. Dumville, and Mr. G. Southam, have been elected to this office.

LEICESTER INFIRMARY.

Notice of a motion to increase the number of medical officers to the Leicester Infirmary has been given by the Committee, appointed some months back, to inquire into the present state of the Institution. The terms of the notice are as follows:—"That in rule 8, page 3, the words 'two physicians and two surgeons' be altered to 'three physicians and three surgeons'; and that the other rules be altered and revised in conformity thereto." In a conversation which followed, any imputation on the conduct of the present medical officers was disclaimed by the parties with whom the inquiry had originated, and ample testimony was borne to the exemplary manner in which they had discharged their duties.

MEDICAL APPOINTMENTS.

William Watson Beever, Esq., has been elected one of the Surgeons of the Manchester Royal Infirmary, in the room of James Ainsworth, Esq., appointed Consulting Surgeon.

M. Baillarger has been elected a Member of the Académie de Médecine, Paris, in the section of Anatomy and Physiology. M.M. Manec and Denonvilliers were among the unsuccessful candidates.

UNIVERSITY OF OXFORD.

The following degrees were conferred at the University of Oxford, June 10th:—*Doctors in Medicine:* Henry D. Scholfield, Brasenose; George T. Fincham, St. John's. *Bachelor in Medicine:* James C. Paxton, Brasenose.

UNIVERSITY OF CAMBRIDGE.

Degrees conferred at Cambridge, June 11th.—*Doctors in Medicine:* D. W. Cohen, C. T. Hare, Gonville and Caius. *Bachelors in Medicine:* C. D. Waite, St. Peters; A. W. Barclay, D. B. Kendal, Gonville and Caius.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, June 25th, 1847:—T. Taylor; W. Haud; H. H. Smith; R. H. Kemp; C. W. Latham; E. Vye; J. Tarzewell; W. L. Thomas; A. Grant; A. W. W. Smith.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, June 10th:—Ernest Powell Wilkins, Newport, Isle of Wight; William Pollard Roberts, Yarmouth, Norfolk; Joseph Richard Morgan, Maidstone; Edward Bunbury Passmore, Lyncombe, Bath; William Pearson Ward, Royal Artillery; John Parkin, Hightown, near Leeds; John Maund, Bromsgrove.

OBITUARY.

Died, June 1st, aged 44, of fever, John Walker, Esq., Surgeon to the Eye Hospital, Manchester, a Member of the Provincial Medical and Surgical Association. Mr. Walker fell a sacrifice in the performance of his duties as a district surgeon, and we regret to add, has left a family unprovided for.

June 2nd, at Glasgow, of typhus fever, William Ferrie, M.D.

June 12th, at Ham Common, Surrey, John V. Bridgman, Esq, Surgeon.

June 15th, aged 45, John James Wilson, Esq., Surgeon, Doughty Street, Mecklenburg Square.

June 17th, aged 39, Harris Dunsford, M.D., Upper Seymour Street, Portman Square.

June 23rd, aged 39, of inflammation of the throat, after a few hours' illness, Jordan Roche Lynch, M.D., of Farringdon Street, well known as an advocate of medical and sanatory reform measures. Dr. Lynch was the author of a Life of Cosmo de Medici, a History of Cholera in Paris, and of Essays on the Chemical Treatment of Fever and on Laryngitis. In the year 1845, the Hunterian Oration being omitted at the College of Surgeons, he delivered an Oration at Exeter Hall, which may vie with many of those delivered within the walls of the College.

METEOROLOGICAL JOURNAL FOR APRIL, 1847.

Observed at Uckfield, Sussex, by C. L. PRINCE, Surgeon.

		DEGREES.
Maximum Temperature in the Shade,	24th	66.
Minimum ditto	17th	23.
Mean ditto		46.41
Range of ditto		43.
Mean daily Range		23.03
Mean Maximum		57.92
Mean Minimum		34.90
Maximum in the Sun	21st	75.
Minimum on the Grass	17th	21.
Extreme Range		54.
Mean Maximum in the Sun		65.43
Mean Minimum on the Grass		31.86
Mean Dew-point, 9 a.m.		37.72

		INCHES.
Mean Pressure		29.786
Maximum ditto	22nd	30.04
Minimum ditto	2nd	29.25
Range		.79
Depth of Rain		.69
Evaporation		3.23

Prevailing Wind, North-West.

BOOKS RECEIVED.

A System of Surgery. By J. M. Chelius, &c. Translated from the German, and accompanied with Additional Notes and Illustrations. By John F. South, late Professor of Surgery to the Royal College of Surgeons of England, and one of the Surgeon's to St. Thomas's Hospital. Part XVI. London: Renshaw. 1847.

Cold and Consumption; or Consumption, its Prevention, and Cure, by Cold, as a Constitutional, and Inhalation, as a Local Agent, &c. &c. By Henry C. Deshon, Member of the Royal Colleges of Physicians and Surgeons of London, &c. London: Renshaw. 1847. 8vo., pp. 153.

On Dyspepsia, with Remarks submitted in support of the Opinion that the Proximate Cause of this, and of all other Diseases, affecting the General System, is Vitiation of the Blood. By John Burdett Steward, M.D., Fellow of the Royal College of Physicians. London: Churchill. 1847. pp. 106.

Observations on Aneurism, and its Treatment by Compression. By O'Bryan Bellingham, M.D., Edin., Fellow of, and Professor in, the School of the Royal College of Surgeons in Ireland, &c. &c. London: Churchill. 1847. pp. 181.

Vaccination considered in Relation to the Public Health, &c. By John Marshall, Surgeon, &c. London: Renshaw. 1847. 8vo., pp. 35.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

COUNCIL PRIZE.

The Committee appointed at Norwich for the management of the Council Fund for the present year beg to announce that THE COUNCIL PRIZE of £50 will be given for the best Report "On the Cerebral Affections of Infancy."

The prize is open to general competition; the papers to be sent in to the Secretary of the Committee, Dr. Streeten, Worcester, on or before the 31st of May, 1848, each paper to have a motto affixed, and to be accompanied by a sealed envelope, bearing the same motto, and inclosing the name of the author.

NOTICE TO MEMBERS.

Gentlemen who have not yet paid their subscriptions for the current year, or who are in arrears, are requested to forward the amount due, either to the Secretary of the District in which they reside or to the Treasurer or Secretary of the Association, on or before the 10th of July, as the accounts for the Anniversary Meeting must then be made up.

ROBERT J. N. STREETEN, Secretary.

SUFFOLK BRANCH.

The Secretary of the Suffolk Branch, would feel obliged by those members in his district, who have not paid their Subscriptions for the current year, to do so either by post-office order, made payable to Charles Robert Bree, Stowmarket, or to pay the same to his account, with Messrs. Dukes and Co., Stowmarket, intimating to him when such payment is made. Should any Member in the Suffolk Branch not have received the last volume of "Transactions," Mr. Bree would thank him to write to him upon the subject.

Stowmarket, June 22, 1847.

TO CORRESPONDENTS.

Communications have been received from Dr. Campbell; The Birmingham Pathological Society; Mr. W. Jackson; Dr. E. Ballard; Mr. Worthington; Dr. Shearman; Dr. E. Copeman; Mr. Crosse; Mr. W. E. Crowfoot.

The withdrawal of the Medical Registration Bill renders it unnecessary to insert the petition of the Council of the National Institute of Medicine, Surgery, and Midwifery.

Mr. Lord's letter, and Dr. Shearman's reply to Mr. Allison, are unavoidably postponed till the next number.

It is requested that all letters and communications be sent to Dr. Streeten, Foregate Street, Worcester. Parcels and books for review, may be addressed to the Editor of the Provincial Medical and Surgical Journal, care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

THE RETROSPECTIVE ADDRESS,

DELIVERED AT THE SIXTH ANNIVERSARY OF THE READING PATHOLOGICAL SOCIETY.

By Edward Wells, M.D., Physician to the Royal Berkshire Hospital.

Gentlemen,—In accordance with the wish expressed at your last meeting, I have ventured to undertake the task of drawing up the report of our proceedings during the past year. Unqualified as I feel myself to be for the due performance of this undertaking, I will not waste your time in making fruitless apologies for the manner in which it has been accomplished. I will only say that my desire has been to act the part of a faithful historian of what has been said and done, rather than that of a critic of the opinions promulgated. Even if I had thought of aspiring to the latter office, the abundance of the materials placed at my disposal for insertion in this evening's address would have quite forbidden the idea. The few remarks I have interposed have been made, either with the view of connecting the reported cases, or of drawing attention to particular facts which appeared more especially worthy of notice. Before proceeding, however, to the specific matter of this report, I must bear witness to the admirable manner in which the minutes of our meetings have been kept by our excellent Secretary, Dr. Woodhouse. It is but justice to him to set out by observing, that should this address fail to interest you, or to present a faithful portrait of the principal features of the transactions of our Society during the past year, the fault lies in your Reporter, and not in your Secretary.

The arrangement which I have adopted in relating the cases, &c., which have been brought before us, is the same as that generally made use of by my predecessors,—that is to say, they have been arranged in reference to the various systems of the economy to which they belong, independently of the period at which they were presented to the Society. In only one point have I ventured to depart from the established custom, and that is with respect to the papers and communications, (very few, I regret to say, in number,) which I have also arranged under the same heads as the morbid specimens.

I.—Diseases of the Nervous System.

I am unfortunately enabled to present you only one case. The great interest which attaches to the disorders of the nervous centres and their ramifications, makes one regret that our reports are not richer in details of this class of diseases, and might induce us to ask ourselves the following mortifying question:—Is it because of the trouble which is necessarily incurred in making examination into the state of the brain, spinal cord, &c., that this paucity exists?

Hydrocephalus acutus.—On the 3rd of March, 1847, Dr. Woodhouse related the case of a child, aged fifteen months, who died from hydrocephalus, which came on in the usual insidious manner, and which leeches, blisters, and purgatives, with mercury, both internally and externally applied, failed to arrest.

On examination, the brain was found to be softened about the posterior cornua of the lateral ventricles, which latter contained a considerable quantity of serum. A brother of this child had died at the same age about twelve months before.

It may be remarked upon this case, that as no notice is taken of the state of the membranes, it is to be presumed that no tubercles were found in the meninges, and that therefore, as far as a single case can do, it invalidates the view of M. Rilliet, and other French pathologists, who look upon hydrocephalus as neither more nor less than tubercular meningitis. In opposition also to this view, your reporter may mention, that in a case of hydrocephalus acutus, which he not long since examined, with Mr. Day, and in which the lateral ventricles were much distended with serum, the membranes were carefully examined without discovering any tubercular infiltration.

II.—Diseases of the Respiratory Organs.

I have but little to offer you on this head. On the 2nd of Sept., 1846, Mr. Harrinson read the case of a man in whom he had found great distension of the bronchial tubes. He had been treated previously for phthisis. The lung was in a state of cirrhosis. Mr. Harrinson then gave the diagnosis between this disease and phthisis, and pointed out why it could not be the latter.

Sonorous Inspiration.—On the 4th of November, 1846, Dr. Cowan mentioned the case of a girl, aged 19, who, after a fright, was seized with a curious kind of sonorous inspiration, the seat of which appeared to be located in the larynx. It occurred regularly all

day, but ceased at night, which would imply that it was not *spinal*. Blisters to the nape of the neck, purgatives, &c., had produced no beneficial influence. It would appear to have been an hysterical constitution of the larynx.

III.—Diseases of the Circulating System.

I am glad to say that in this division our materials are not so meagre as in the two preceding classes of disease.

Hypertrophied Heart.—On the 4th of November, 1846, Mr. Harrinson presented a heart, which he had removed a week ago from a man to whom he was called in the night, but the patient had died before he could reach him. He had always enjoyed good health, excepting slight dyspnœa on exertion. On examining the chest some time previously, he had found the pulsation of the heart so excessive, that it shook the chair whereon the patient sat. There was a soft *bruit de soufflet* all over the heart, and great regurgitation in the vessels of the neck. He diagnosed obstruction of the valves, with regurgitation probably through both the aortic and mitral valves.

On examination after death, the lungs were found quite healthy. The pericardium was perfectly adherent; the heart enormously enlarged; the left cavities excessively dilated; the right very small; the arch of the aorta dilated. The aortic valves contained some gritty deposits, and were patulous, allowing regurgitation. His only ailment had been a rheumatic gouty affection of the knuckles.

Cyanosis.—On the 5th of August, 1846, Mr. May presented to the Society the heart of an infant who was born cyanotic. A few days after birth floridity was somewhat increased, but about the seventh week the child sank. On examining the heart, the foramen ovale was open; and, as was usual in about half of these cases, the pulmonary arterial valves were coarcted or obstructed; the right side was hypertrophied, evidently from an effort of nature to overcome the obstruction.

This interesting case may be said to confirm the opinion of Dr. Craigie, that the anatomical cause of the open foramen ovale, and the hypertrophy of the right ventricle, is to be found in the contraction of the pulmonary artery, and that the open foramen ovale is to be regarded in the light of a safety valve, to relieve the impeded pulmonary circulation.

That the open foramen ovale is not, as was at one time supposed, the cause of death, is proved among other instances by one which has been related by Dr. Spitta, in the "Medico-Chirurgical Transactions" for 1846. He has there given an account of a case of cyanosis of 40 years' standing, in which the pulmonary artery was obstructed, the right side of the heart hypertrophied, and the foramen ovale patulous.

Aneurism.—It is hoped that the interest of the following case, in reference to the treatment of aneurism by compression, will plead for the length at which it is reported.

On the 8th of July, 1846, Mr. May presented specimens of diseased arteries, taken from George Rogers, a milkman, of sober habits, who was admitted into the Hospital on June 9, 1846, with aneurism of the posterior tibial artery. His countenance was anxious; he had not been subject to gout or rheumatism, nor affected with syphilis. Some little time back, while carrying a load of milk, he felt something give a popping sensation in the calf of the right leg, followed by pain and swelling of the part.

On admission, the calf of the leg was found to be hard and swollen; pulsation was felt over the whole swelling, synchronous with the heart. The aneurismal bruit was very distinct. By pressure on the femoral artery the pulsation was obliterated, and the sac much diminished in size. The superficial veins were distended.

It being determined to treat the case by pressure, this was applied over the superficial femoral in such a manner as to diminish, without interrupting, the current of blood. This was accomplished by means of two tourniquets,—viz., Sanctorini's, and a modification of Dr. Oke's, made by Weiss. The former was found the more useful. Pressure was also made occasionally by the thumb on the common femoral artery. By alternately tightening one, and then the other, tourniquet, this treatment was continued without any material discomfort until the 28th. At this time there appeared a decided improvement in the condition of the aneurism. Compression of the artery was now directed to be made more continuously, and so as completely to stop the circulation through the aneurism. On the 30th pounded ice was also applied to the tumour.

On July 2nd, Mr. May states, "At my visit this morning I found that he had passed a restless night, with slight delirium; he was confused, and had some subsultus. Tongue furred; pulse frequent and sharp. He became quiet during the day, but towards evening the cerebral symptoms were more pronounced; he became unconscious, and the respiration much embarrassed."

On the morning of the 3rd, paralysis of the left side was observed, and he died at one o'clock p.m.

Post-mortem. The vessels of the pia-mater were much engorged; both ventricles distended with dark fluid blood. There was a large coagulum (one and a half ounces,) in the posterior lobe of the right hemisphere. Lungs healthy; pleura adherent at the apex of left side; a chain of hardened glands were found dipping into the chest under the first left rib. Heart: the edges of the semilunar valves and opposing surfaces of the aorta were irregular, thickened, and contained here and there bony deposit; the rest of the aorta was healthy. The femoral arteries were diseased alike, bony matter being deposited in each from half an inch below the profunda to their termination. The two ends of the ruptured posterior tibial artery could be traced into the aneurismal sac, which now appeared of the size of a duck's egg. It was invested by the deep fascia, and the posterior tibial nerve was tensely stretched over it. The sac contained two-thirds of firm fibrin, and one-third of dark coagulated blood; the fibrin was deposited at the upper or cardiac side of the sac, and the blood at the lower or distal; the

fibrin was in one solid mass, not laminated. The artery was much diseased both above and below. The femoral artery at the portion submitted to compression was flattened, and there was slight echymosis of the muscles of the thigh, as well as about the gastrocnemius and solæus.

In reference to this case, Mr. May observed, that he had no doubt but that the deposition of the fibrin was the result of treatment, as before this was commenced, the sac could be emptied. The shape of the deposit, the large end above the thin end, together with the blood below, was a fact of the greatest importance. It shewed that the blood probably entered from below, and it strongly suggested the propriety of making compression in that situation. This peculiar modification in disease of the artery was noticed by Bizot, who asserts that the posterior tibial artery and the cerebral arteries were the most liable to assume it. Bizot also asserts the symmetrical occurrence of arterial disease to be an absolute law. These remarks would seem to receive striking confirmation from this interesting case.

Mr. May much regretted the attempt entirely to stop the circulation, as he had no doubt but that it was the more immediate cause of the patient's death. The proper object of the treatment was, by diminishing the impetus, to give time for the separation of fibrin in the sac, and thus to obliterate its cavity. Had more time been given in this case, the result would probably have been different. Ligature of the artery at any point below the common femoral would have failed by hæmorrhage in consequence of its diseased condition, and had a ligature been placed higher up, the risk of mortification would have been incurred. Mr. May considered that the case told strongly in favour of compression, if conducted in a more slow and gradual manner, and said that in a similar case, he would apply pressure first on the cardiac side of the tumour, and afterwards on the distal also, the object being to diminish, but not to stop the current through it.

In confirmation of the practice which this important case has induced Mr. May to recommend, it will be remembered that in the twelve cases of aneurism cured by compression, which were related to the Surgical Society of Ireland, by Dr. Bellingham, and of which nine were popliteal and three femoral, the femoral artery could be traced nearly as far as the sac of the aneurism, shewing that the artery was not obliterated at the point of compression. Dr. Bellingham then stated that the compression should not be carried so far as completely to intercept the circulation, as the consolidation of the aneurism would be more quickly effected by allowing a feeble current to pass through the sac of the aneurism.

Instrument for the Treatment of Aneurism by Compression.—While on the treatment of aneurism by compression, I may mention that on the 2nd of September, 1846, Mr. F. Bulley exhibited to the Society the model of a very clever instrument, which he had recently invented for this purpose. As a drawing of this instrument, with a description of its use has been already published in the *Medical Times*, it will be sufficient to remark in this place, that the invention received the unanimous approval of the Society.

Aneurismal Varix.—On the 30th of September, 1846, Mr. Harrinson presented a drawing of an aneurismal varix. When the subject of it was three years old, another child threw a sharp knife at her, which struck the temple. The mother withdrew the knife; a little blood followed, and soon after a swelling appeared, which is now daily increasing. A bruit of a very intense character is heard on applying the stethoscope to it. Mr. Harrinson diagnosed it to be a case of aneurismal varix, and presumed that the knife had transfixed the vein, and wounded the temporal artery, and that the two now communicated with each other. It might be treated by pressure, ligature, or electro-puncture.

Aneurism of the Aorta.—On the 28th of April, 1847, Mr. Day presented an interesting specimen of aneurism of the aorta, with the following history. He was attending Mrs. A., aged 40; she had been a strong active woman till eight months ago, when her health first began to fail; had been married twenty years, and had one child nineteen years old. She complained of pain and difficulty in swallowing, requiring fluids to accomplish it, with severe pains in both shoulders, and a short hacking cough; but she had no severe cough indicative of diseased lung. He considered her complaints nervous, and treated her accordingly. Her chest was not examined. One day while eating her dinner, a quantity of blood gushed from her mouth, and she instantly died.

Post-mortem, a few hours after death. Present: Mr. Harrinson. Pharynx, bronchi, &c., filled with blood; lungs remarkably healthy. On turning out the left lung and examining the aorta, a dilatation of considerable size—an aneurism—was seen at the commencement of the descending aorta, after giving off the left subclavian artery. The aneurism was intimately adherent to the bodies of the third and fourth dorsal vertebræ, which were carious and indented. On carefully laying open the œsophagus posteriorly, an opening was seen on its anterior aspect, large enough to admit a finger, and irregular in shape, communicating with the aneurismal sac, through its posterior wall. It was the establishment of this communication that had given rise to the hæmorrhage, so sudden and so fatal. Heart small; valves healthy; the anurismal sac was lined by some layers of fibrin. The rest of the aorta and the large vessels were apparently free from disease. It may be remarked that the left vertebral artery arose from the aorta between the carotid and the subclavian. Stomach much distended, reaching nearly to the pubes; it contained three or four pounds of blood; the intestines were also filled to a greater or less extent with blood. Left kidney large; right small; both mottled; bladder remarkably contracted. Uterus larger than normal; left ovary as large as an orange, forming a simple sac, containing fluid; right ovary beginning to degenerate in a similar manner. Liver small, contracted, hard; gall-bladder confined and nearly obliterated by firm adhesions, which were numerous on the inferior surface of the liver. It was interesting to note the condition of the uterine appendages in connection with her history.

Mr. Harrinson then referred to the diagnosis of aneurisms of the ascending and descending aorta. In the former, the trachea being involved, aphonia would be present; while, in the latter, the œsophagus being pressed on, dysphagia would be the prominent symptom, as in the case just related.

This case shews the necessity of exercising great caution in the use of the probang in instances of dysphagia. Had that instrument been used in the present instance, there is little doubt that a fatal result would have immediately followed its application, and ignorance might have attributed death to the manipulation of the surgeon.

IV.—Diseases of the Digestive System.

Acute Glossitis, Pharyngitis, &c.—On the 2nd of September, 1846, your reporter mentioned the case of a young lady, to whom he had been called, who had during an hysterical fit swallowed an ounce of pure spirit of hartshorn. Violent inflammation of the tongue and fauces followed. She was unable to swallow lemonade, but managed to take some iced water, by holding the ice in her mouth, which evidently relieved her distressing symptoms. Leeches were applied to the external fauces, and aperient enemata administered, and after a few days she perfectly recovered.

Convulsions and Death after over-feeding in a Child.—It may be doubted whether the following case should stand where it does, or should have been arranged among the diseases of the nervous system. On the 3rd of March, 1847, Mr. Harrinson related a case which had occurred to him about a month previously. It was that of a child, three years of age, who after being feasted on the anniversary of its birth-day, became sick in the evening, with slight paralysis of one side. On the following evening when he saw it, there had been violent convulsions. Supposing it to be a case of indigestion from over-loaded stomach, he prescribed calomel and jalap, which operated freely. The child, however, passed a restless night, and on the following day he found it moribund, with profuse perspiration of the head and face. No examination of the body was allowed, and Mr. Harrinson doubted whether the symptoms were attributable to the stomach or head.

In reference to this case, Dr. Woodhouse mentioned that of a girl, which had been reported to him by a medical friend, where after a hearty meal of cold beef and carrots, coma supervened. Bleeding, cupping, &c., were used without benefit. His friend suggested the exhibition of an emetic, which instantly restored her to consciousness.

Perforation of the Stomach.—On the 3rd of March, 1847, Mr. J. Workman exhibited an ulcerated stomach, and gave the following outline of the case. He was called in great haste to a female, whom he found lying before the fire complaining of great pain over the epigastric region. He administered some anodynes, but on the next day found that no improvement had taken place. She gradually sank in thirty-six hours. Upon examination he found the abdomen filled with effused matters. There was a large ulcerated opening, with thickened edges, in the lesser curvature of the stomach. He knew nothing of the previous history of the case, but understood she had been an out-patient at the hospital, complaining of an affection of the stomach and heart.

It is much to be regretted that Mr. Workman was, owing to circumstances, unable to furnish the Society with more accurate data of this case. It would have been interesting to know whether it confirmed the opinion at which Mr. Crisp has arrived, "that uterine derangement is, in the majority of cases, the predisposing cause of this affection." Unfortunately, however, the age of the subject is not stated, and we are, therefore, unable in the present instance, to connect the disease with the period of the catamenia. It will be observed that the perforation was situated in the lesser curvature of the stomach, which is almost always the point of election where females fall victims to this fearful disorder. Since the above was written, I have ascertained that her age was about 45.

Perforation of the Ileum.—On the 2nd of September, 1846, Mr. Walford presented a portion of the ileum of a man aged 28, who was seized in the night with violent pain in the bowels. He lived from the 25th to the 27th, (forty-eight hours.) A perforation of the bowel was suspected, and on examination after death, the ileum was found to be ulcerated, an ulcer at one point opening into the peritoneal cavity. The coats of the intestine were thickened, and traces of peritoneal inflammation were discovered. Mr. Walford had not attended the patient previously, but learnt from his wife that he had never been well since an illness he experienced in February last, the nature of which could not be satisfactorily made out.

Mr. May remarked that these cases generally occurred in connection with tubercles or typhus fever. This was the rule; their occurrence, independently of these complications, was the exception.

Congenital Contraction of the Intestines.—On the 3rd of February, 1847, Mr. Harrinson presented the intestines of a child, apparently healthy when born, but who soon began to decline in strength, and to vomit. He examined the anus and rectum, and found it pervious for two inches, but above that point he could pass no instrument. Vomiting of the meconium continued, with inability to retain the milk it sucked, or any other fluid on the stomach, and it gradually sank, with all the appearance of strangulated or obstructed bowels.

On examining the abdomen the intestines presented the following curious appearance:—The upper portion of the jejunum was contracted, this contraction gradually extended along the ileum and colon, until it ended in the rectum in an almost perfect *cul de sac.*

Mr. Harrinson regretted that he had not persevered in the use of enemata, as they might possibly have distended the rectum. He did not consider the contraction as pathological, but as physiological; it appeared to be due to a want of secreted matter to pass downwards, and he regretted that he had not examined the liver more minutely, to ascertain if there was a proper secretion of bile.

Cancer of the Cæcum.—On the 2nd of September, 1846, Mr. Harrinson read a case of cancer of the cæcum, accompanied with obstruction of the bowels, in which the small intestines were found distended with flatus, the colon empty, and much contracted. The cæcum was found to be enveloped in a mass of cancerous matter, larger than a man's fist, with an adherent nodule the size of a walnut, and connected at its upper part with the lower edge of the liver. Small masses of similar deposit were also observed scattered through the mesentery, omentum, on the surface of the liver, and in the cavity of the pelvis. One of a larger size half surrounded the sigmoid flexure of the colon. The internal structure of the liver, kidneys, stomach, &c., was apparently healthy. On examining the cæcum the termination of the ileum was greatly dilated, and distended with fæces. The ileo-colic valve was perfect, but much hypertrophied and elongated, extending into the cæcal cavity, like an elongated cervix uteri. On laying open the cæcum, it presented a large irregular ulcerated cavity, with the walls from a quarter of an inch to one inch in thickness, and containing masses in a state of separation or mortification, and of extreme fœtor.

Two questions arose in this case as to the cause of the obstruction,—1st., as to whether it was fæcal or mechanical; 2nd., as to the seat of the obstruction. The farther the obstruction is from the pylorus, the less is the pain and the vomiting. As these were not very great, the inference was, that it was low down. The great distension also proved this. Another circumstance which indicates the seat of the obstruction, is the effect on the urine; when it is seated high up, the urine is more or less suppressed; when low down, it is not affected. Speedy or tardy collapse also follows the same rule.

In the conversation which ensued upon this case, Mr. May mentioned that in cases of obstruction he had found the best treatment to consist of enemata; if, after their exhibition, there was no improvement, he had recourse to opium, with leeches and poultices. He considered the virtue of the opium consisted in restraining the peristaltic action of the intestine, and quieting the system, and he believed we were generally in error as to the necessity of emptying the bowels, for that the retention of fæcal matter for a longer time than usual, was of no great detriment.

Secondary Cancer of the Liver.—On the 30th of September, 1846, Mr. May presented a portion of the liver which he had taken from a lady who died two days previously. He gave the following history of her case:—She had not borne a child for ten years, when she became pregnant about two years ago. At the beginning of her pregnancy she came to him for an affection of the mamma, which he found to be scirrhus. It was treated with palliatives. She went through her pregnancy well, got through her labour easily, and continued to enjoy tolerable health for some time. She then began to complain of pain in the back, and was unable to ride on horseback, and take her usual exercise. She became emaciated, sub-jaundiced, and the subject of ascites.

Upon examination after death the liver was found to be very much enlarged, and having a lobulated appearance. Upon cutting into the lobules, they were found to contain nodules of scirrhous deposit. The internal structure of the liver was also hardened, and put on the character of cirrhosis. Mr. May remarked that Dr. Walshe does not exactly describe this form of the disease, and says that cirrhosis and cancer do not usually accompany each other. But he (Mr. May,) did not see why they might not co-exist. There were about three gallons of sero-purulent fluid in the abdomen. The kidneys and uterus were healthy; the mamma was scirrhous, confirming the curious fact that where cancer is found in the breast, it does not affect the uterus, and *vice versa*. There was some fluid in the chest, and the apices of both lungs were occupied with cancerous infiltration to a small extent. Some of the deposit taken from the liver, shewed under the microscope several nucleated cells, floating around large globules of fat.

Enlarged Spleen.—On the 2nd of December, 1846, Mr. Harrinson presented part of the lungs, liver, and an enormous spleen, removed from a gentleman, aged 67, a native of Lincolnshire, where he had ague. He had left that county, however, at 18 years of age. He was of active habits, and his general health had been remarkably good; it had, however, been failing for the last twelve months. His great complaint was pain across the stomach, and constipation. He never had sickness, vomiting, or spasms. While much as usual he was seized with a violent rigor, and quickly afterwards became partially insensible. Next day he was found to be jaundiced, alternating between a state of coma and muttering delirium, with a dry skin, feeble pulse, and troublesome cough. The abdomen on examination, was found much distended, liver enlarged, and in the left hypochondrium a tumour, part of which from its prominence could be laid hold of by the hand. He continued in much the same state, with intervals of partial coherence, for six days, when he died.

Post-mortem.—Lungs much loaded with melanotic deposit; slight adhesions, with a small deposit of doubtful adventitious tissue, at the base of each lung; liver large, with two or three slight portions, offering a mother-of-pearl appearance; stomach adherent above to left lobe of the liver, and behind extensively to a large mass of scirrhous deposit, lying on the spine and around the aorta; spleen enormously enlarged, and proving to have formed the tumour which had been observed in the left hypochondrium during life.

In this case the enormous enlargement of the spleen is curious, when viewed in connection with the ague from which the patient suffered in early life, as it is well known that M. Piorry has ascribed the pathology of ague to enlargement of that viscus.

(To be continued.)

REPORT OF A CASE OF OVARIAN DROPSY SUCCESSFULLY TREATED, WITH REMARKS.

By Thomas Hunt, M.R.C.S.E., Herne Bay.

Encysted dropsy is a disease for which no sensible man would prescribe an uniform method of treatment in every case. The circumstances under which it occurs are so various, that the modern controversy concerning extirpation, and other modes of arresting its course, might be reduced to a much smaller compass than it now occupies, if every writer would confine his observations to certain marked peculiarities of any individual case, instead of presuming to contend for any general method of treatment, as adapted to all, or even to a large proportion of the cases met with in practice.

The treatment recently advocated (though not originated,) by Mr. J. B. Brown, of Paddington, consisting of pressure, mercurials, diuretics, and tapping, appeared in the first instance remarkably successful; but it has notoriously failed in one or two instances, and has been attended with extreme danger in others. His cases are, however, full of practical interest and instruction. The treatment of the following case was detailed in the *Lancet*, January 24th, 1846, and its sequel up to the present time is satisfactory. The leading particulars are as follows:—

The patient, Mrs. F., aged 30, a healthy subject, was delivered of her fourth child in the month of January, 1841, and on this occasion the nature of the tumour was first demonstrated. She was then residing at Ingatestone, and Mr. Cornelius Butler, who attended her, gave her subsequently the following memorandum in writing:—

"In Mrs. F's last confinement, the progress of the head of the child was much impeded by a tumour in the recto-vaginal septum. After some difficulty I delivered her with the forceps. I merely write this to sanction the puncture of the tumour, if it be necessary, at any future time, as it has increased considerably, by the testimony of the gentleman who attended her previously, and with whom I am acquainted.

"C. H. Butler.

"Ingatestone, Jan. 1, 1841."

Her previous labours had been difficult, and the tumour had probably existed for several years. He subsequently observed an enlargement on the left side of the abdomen. In the autumn of 1843, proving again pregnant, she consulted Dr. Blundell, who is said to have advised her then medical attendant to have recourse to premature delivery. This was accomplished in the sixth month of utero-gestation. From this time the abdominal tumour increased more rapidly. In the autumn of 1845 she placed herself under my care.

October 15, 1845. The abdomen measures thirty-four inches; parietes very thin; umbilicus prominent; fluctuation very distinct; health moderately good; menstruation regular. The os uteri is slightly tumid, and has rather more sensibility than usual, but presents no indication of disease. She has the appearance of a woman in the seventh month of pregnancy.

22nd. The abdomen was tightly bound with a flannel bandage, which was renewed night and morning. One drachm of the strong mercurial ointment was directed to be rubbed into the abdomen every night, a diuretic mixture ordered to be taken twice a day, and three grains of blue pill night and morning.

24th. The diuretic having produced vomiting, the medicine was administered in the effervescing form. She had great uneasiness in the chest from the tightness of the bandage.

28th. She complains of vomiting, and pain in the jaws. The gums and throat are very sore, and a copious salivation has set in. The quantity of urine passed for the last three days exceeds that of the fluid swallowed; the abdomen is decreased in size about two inches. Discontinue the mercury.

30th. The mouth continues excessively sore; the soft palate is extensively, but superficially, ulcerated; the tongue can scarcely be protruded, and the salivation is unabated; flow of urine still copious; the stomach rejects all medicine, except an occasional dose of aperient pills; the menses have appeared at the end of a fortnight from the last period; the abdomen measures less by three inches than at the beginning of the treatment. Milk diet ordered.

November 4th. The soreness of the mouth is beginning to amend slowly. Urine smaller in quantity since the diuretics have been rejected, which has happened in every form of their administration.

11th. Improving in health; is able to take more nourishment; secretion of the kidneys diminished; bowels costive; the abdomen, having previously measured less by three inches and a half, is now somewhat increased in size. The bandage has been constantly applied, but cannot be borne very tight. Ordered a dose of aperient pills.

12th. The cyst was tapped by Mr. Brown in my presence, and nearly nine pints of fluid were drawn off. It was almost as clear as water, and as colourless. When treated with nitric acid, at a high temperature, it exhibited a slight albuminous cloud, scarcely visible at the time, but distinctly precipitated on the following morning. She bore the operation without fainting, and was put to bed, tightly bound with a flannel bandage, a book, enveloped in napkins, being applied to the umbilical and pubic regions, as a compress.

13th. She has had a tolerable night, but complains of headach. She has passed five pints and four ounces of urine since the cyst was tapped, and has taken only a pint and a half of fluid. The bowels being costive, a dose of aperient pills was ordered, and some gin-and-water.

14th. The pills excited vomiting, but have acted on the bowels. Complains of the corners of the book hurting the ribs and hips. A large toilet pin-cushion was substituted, and the bandage re-applied. She has nearly lost her appetite, feels weak, and is distressed with flatulency. Ordered a glass or two of wine.

15th, 16th, and 17th. Has been constantly harrassed with flatus; when the bandage is withdrawn she eructates an immense quantity of gas. Urine about equal to the fluids taken.

18th. Appetite entirely gone; she has slept but

little; is much depressed in spirits; pulse 120; skin hot; abdomen somewhat tender; urine scanty; bowels costive. A cathartic pill was ordered, and an effervescing draught every fourth hour.

19th. Better to-day; skin cool; pulse weak and slower; complains of noises in the head; has drunk about a quart of fluid, and passed less than that quantity of urine; the bowels have been freely relieved. An attempt was now made to resume the mercurials and diuretics, but it was found impossible to persevere. The stomach became excessively irritable.

24th. It is proper to mention that, about three weeks ago, one of her children returned from a visit to town with slight fever, (synocha;) since that time a second and third child have drooped with a similar febrile affection, and during the last week the mother has evidently been suffering from this cause. She has had a hot skin, rapid pulse, pain in the head at first, then noises and deafness. She has also been perpetually retching. An aperient pill was prescribed, the bowels being constipated, and effervescing medicines at short intervals.

25th. She has been delirious in the night, sitting up and singing. She is vomiting green bile. Pulse 125, weak; eyes glassy; manner excited. Blister to the back of the neck. Opium and calomel, a grain of each, relieved the vomiting, and she was better in the evening.

26th. She has had a restless night, but no delirium; the vomiting continues. She is much dejected; says she has been doing nothing but vomit for a fortnight, and cannot bear it much longer. She complains of distressing thirst, and thumping noises in the head, but no pain. Pulse 120, weak; features sunken; skin moist, but hot. The vomiting was by degrees controlled by repeated doses of creasote.

27th. Somewhat better. Complains much of the heat of the flannel bandage. A linen towel tightly pinned round the pelvis was substituted. A cold lotion was applied to the head, and the hair taken off.

December 1st. There has been some improvement for a day or two, but she is worse to-day. Has slept much, and is now (eleven a.m.) in a copious perspiration, but is again vomiting a dark green fluid. The creasote to be repeated every fourth hour.

Evening: No vomiting, but nausea and eructations. Pulse 120, very feeble; countenance hippocratic. The morning perspiration having been excessively copious for about two hours, was succeeded by general coldness. She is now hot and dry. The tongue has presented an appearance throughout remarkably normal. The creasote to be continued, and a little brandy-and-water occasionally.

2nd. She has slept a little; has had no return of the vomiting or nausea, but feels "dying weak." The creasote to be continued.

Evening: She has again perspired most profusely; feels somewhat better; pulse fluttering; speech affected; great exhaustion; no nausea nor eructations. Take of sesquicarbonate of ammonia, one scruple; aromatic confection, half a drachm; camphor mixture, six ounces. A fourth part every five hours. She longs for some home-brewed ale. Let her have it.

3rd. Decidedly better; has slept well. A fortnight has now elapsed since the first accession of fever, and it seems to have arrived at a crisis.

9th. She has continued fluctuating, but gaining ground. The perspirations have frequently returned, and likewise the eructations and vomiting, which nothing would permanently relieve but the removal of the bandage. It has accordingly been abandoned, and her stomach has become very comfortable. She takes nourishment in small quantities. Pulse 90; urine scanty; skin soft but no disposition to profuse perspiration. There is no perceptible tumour in the abdomen, the muscles of which are so relaxed and attenuated that the presence of a tumour, if it existed, could scarcely escape observation.

January 7, 1846. She has now a good appetite, and is gradually regaining her strength, but still totters as she walks, and complains of confused noises in her head. The secretion of urine is normal, and there is a slight œdema of the feet towards evening, but not more than frequently occurs upon first sitting up after a long illness. She has recovered her hearing and is in good spirits. The abdomen is flat and no vestiges of any tumour are discoverable.

April 28, 1847. The patient has continued in good health during the last fifteen months, and she was delivered of a full-grown male child on the 4th of this month, after a natural and easy labour, having never previously had an easy labour at the full period. A few days after her delivery, a careful examination of the abdomen discovered no tumour, except the contracted uterus in its proper position. In all probability, therefore, the disease is cured.

It is now sufficiently established that many cases of unilocular dropsy will yield to these four remedies conjointly, not however, as it would appear from this case and others published by Mr. Brown, without some degree of inconvenience and danger.

The next question for experimental enquiry is,—can this practice be so modified as to avoid the objections attending it. These objections are chiefly,—the dangers attending the use of mercurials conjointly with the operation of tapping, and the inconveniences of severe pressure around the abdominal parietes. Mr. Brown himself has now been led by his experience to repudiate the former, and Dr. Locock has given his testimony to the use of bandaging without mercurials. It appears to me that after the operation of tapping, diuretics are useful as tending to divert the blood supplying the cyst, and to expend it on the kidneys; and to avoid the evils of pressure upon the bowels generally, perhaps a sort of spring tourniquet or truss might be so applied over the ovary as not to distress the other viscera. I throw out the hint for the use of those who are much in the habit of treating these diseases.

Herne Bay, May 14, 1847.

CASE OF ABSCESS OF THE NECK, FOLLOWED BY FATAL HÆMORRHAGE.

By William Jackson, Esq., F.R.C.S., Sheffield.

(Read at the Annual Meeting of the Yorkshire Branch of the Provincial Medical and Surgical Association, held at Sheffield, June 10th, 1847.)

July 16, 1830, I was first requested to visit J. W., aged 19, a young man following the trade of a cabinet-maker, whose general appearance presented to the mind the characteristic features of scrofula. I learnt from his friends that he had suffered for several months from an extensive swelling of the right side of the neck, and had been under the care of a *female practitioner*, notorious for the treatment of *sores*, in a neighbouring town. It was stated, that by the applications made use of she had brought the swelling to a *head*, and at length there was a copious discharge of pus, finding its exit by two or three openings. His health had suffered considerably by the discharge, which had been established more than a month.

I was summoned by an urgent message in the night of the 16th, and found the young man in a state of syncope from loss of blood, from two or three apertures on the side of the neck. The hæmorrhage had ceased, the opening being occupied by coagula of blood. The largest aperture was seated about two inches above the clavicle, and somewhat nearer the sternum than the scapular extremity of that bone. The other apertures were seated more outwardly. The attendants represented the bleeding to have been very sudden and copious, the almost immediate effect of which was complete syncope, and a cessation of the flow of blood. I remained till the patient recovered his consciousness, expecting of course, a renewal of the hæmorrhage; but as he still remained in a languid state, with an almost imperceptible pulse, no immediate measures were adopted for his relief. From the appearance presented by the blood, as stated by the persons present, and from the rapidity of the stream, there could be no doubt but a vessel of considerable magnitude had given rise to the bleeding. The situation of the disease was carefully explored, and there was just reason to infer that the abscess originated from some deep-seated part, most probably from the bodies of the cervical vertebræ. The question presented itself,—from what vessel did the bleeding arise. It might be from the subclavian or the vertebral artery, or the internal jugular vein; for a vessel of inferior magnitude would not pour out blood so rapidly as to sink the powers in so short a time as occurred in this individual. The pulse became gradually restored and consciousness returned. The application of cold, rest, and cooling drinks were enjoined.

On the 17th, the circulation had become moderately re-established, and there had been no return of the hæmorrhage. On the 20th there was a sudden return of the hæmorrhage, which, as before, had quite subsided on my arrival; I found the poor young man deluged with blood, and in a state of insensibility. My friend Sir A. Knight, Mr. Gregory, and the late Mr. W. Staniforth, visited the patient with me to day.

The case was one evidently of unusual occurrence, for all concurred that one of the great vessels in the neighbourhood of the abscess was the source of the hæmorrhage. Was it practicable to secure it by a ligature? This was a most interesting surgical question. We had a disease seated beyond or just at the confines of surgical practice. It is true, in one instance at least, the arteria innominata had been successfully taken up. But here two difficulties presented themselves:—First, if it were taken for granted that the subclavian was the vessel giving out the blood, the breach most probably was very near its origin. A ligature applied at this point would have been a practice in violation of a very important surgical principle,—viz., to avoid such operation upon an artery very near the situation of a large branch or division of a main trunk. Secondary hæmorrhage would almost inevitably be the result. Nothing but the necessity of the case could justify such a proceeding. The second point for our consideration was the great probability of the existence of diseased bone being the cause of the abscess, and consequently connected with the bleeding vessel. Of course a ligature upon an artery under the circumstances of this case would be likely to be less favourable in its results than had aneurism existed in the subclavian, as there would be no probability of enlargement of those branches of the collateral circulation upon which the surgeon would hope for the support of the superior extremity. It was generally considered by the gentlemen engaged in consultation that the hæmorrhage proceeded from a part inaccessible to surgery, and that in all probability extensive disease existed, besides the ulcerated artery giving out the blood. Under these circumstances, therefore, no operative means were advised. After the recurrence of hæmorrhage on the 22nd and 24th, our patient sank.

Post-mortem. The blood-vessels were injected, and it was found that ulceration had occurred in the subclavian artery, as it lies upon the first rib. The rib was in a carious state, as well as the bodies of the contiguous vertebræ. The situation of the ulcerated opening in the artery was towards the bone, and occupied about one-fourth of the calibre of the vessel; the opening was of a somewhat oval shape, and well defined. There was no enlargement of the capacity of the vessel at the part.

Mr. Liston's case at the North London Hospital, reported some years ago in the Journal, about which there was much criticism at the time, if it were really not a case of aneurism, may be considered to bear some resemblance to the one now presented to the Society.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF WILLIAM SANDS COX, ESQ.

By Peter Hinckes Bird, one of the Resident Medical Officers.

(*Continued from page* 296.)

Case XXX.—Ovarian dropsy.

Sarah Fretwell, aged 65, housewife, admitted into the Queen's Hospital on June 26th, 1846; married,

has nine children. She states that about twenty years ago she first perceived a swelling of the belly; she took medicines and she says it disappeared; a short time after the swelling re-appeared, and gradually increased notwithstanding medicinal treatment, until Feb. 10th, 1845, when she was tapped, and a large quantity of fluid evacuated; since then she has been tapped eight times, and 69 gallons of fluid have been withdrawn. The swelling is stated to have come in the front, and not on one side; urine reported as sometimes thick and scanty, sometimes clear and plentiful; has never been jaundiced; has never had rheumatic fever; menstruation always regular up to her change of life; there is no evidence of any disease of the heart, liver, or kidneys; has always been hearty. She states that some time ago she passed considerable quantities of water per rectum. Was tapped three weeks ago.

Present State. The belly is of an enormous size, and projects considerably in front, it measures 54 inches round; the skin is smooth and shining, and is covered by tortuous dilated veins; there is a distinct sense of fluctuation to the finger; there is no uneven feel; both sides are equally swollen; there appear to be adhesions under the parts where she has been previously tapped; she complains of a nasty taste in the mouth; health very good; breath short on walking; tongue rather furred; bowels rather costive; legs not swollen.

July 2nd. Slightly increased, measures 57 inches. She was tapped this morning by Mr. Cox, and eight gallons of a thick glairy fluid were drawn off; she bore the operation very well, but felt rather faint towards the conclusion. The fluid, which was at first very thick, and flowed through the canula but slowly, became, however, rather thinner, and flowed in a full stream until the cyst was emptied; the consistency of the fluid varied at times, and masses of a whitish tenacious substance were frequently passed. When examined under the microscope it presented the appearance of a large mass of granules, which became slightly clearer on the addition of acetic acid, presenting an indistinct nucleus; the clear fluid contained many granules and epithelial scales; the fluid was neutral and albuminous, being very coagulable by heat and nitric acid.

3rd. Pretty comfortable; complains of pain in the iliac regions; is much troubled with flatus.

5th. About the same; is filling again rapidly; sleeps well at night.

7th. Complains of great pain across the abdomen, increased on pressure; tongue coated; pulse quick, small; countenance anxious. To have twelve leeches applied immediately.

9th. Pain quite relieved; tongue clean; pulse natural; walked this morning in the hospital garden; is rapidly filling.

25th. Health good; is now quite as full as before. She was again tapped by Mr. Cox, and more than two buckets full were drawn off. The fluid presented the same characters as the last; the patient bore the operation well, and was not so faint as on the former occasion.

26th. Complains of pain round the seat of the puncture, but is in good spirits; pulse rather feeble, quick; tongue rather coated.

27th. Feels comfortable; in no pain; sleeps well.

29th. Health good; returned home relieved for a time.

OBSERVATIONS ON OVARIAN DROPSY, AND ON THE OPERATIONS FOR ITS CURE.

It is now generally admitted that encysted diseases of the ovary, without reference to those of a malignant character, almost invariably lead to a fatal result. The disease in its progress is often attended with much pain, and with much distress, both mental and bodily; medicine also has little or no control over its progress; it is therefore surprising that so long a period should have elapsed, and that so little has been done until the last few years for the removal of these affections by a surgical operation.

Two measures only at the present day are applied to the surgical treatment of this disease,—paracentesis, and total extirpation. The first of these operations (paracentesis,) is professedly adopted merely as a palliative measure for the present relief of the patient, not for the cure of the disease. In some very few instances the tumour appears to become bound down by adhesions after tapping, and no re-accumulation takes place; but these instances are so very rare that in practising the operation we scarcely ever venture to reckon on the possibility of this occurrence. The tumour may not be fluid, but if it be so and it is tapped, the cyst becomes refilled, it may be slowly, but it usually happens, as in the preceding case in a few weeks, and thus repeated tapping is necessary, the intervals between the operations diminishing until the patient dies, worn out; the average duration of life from the first tapping not exceeding four years.

Paracentesis, however, when adopted, though a palliative measure only, is by no means so free from danger as some practitioners think, and some writers seem to allege. Mr. Southam has tabulated the results of twenty cases of the operation. Four of the twenty patients, or one in five, died of the effects of the first tapping. Four patients died of inflammation within a few days after the operation; three more died in one month; fourteen in all died within nine months after the first tapping. Of the remaining six, two died in eighteen months, and four lived from periods varying from four to nine years. Of eight cases which have come under my own notice, one died a few days after the operation from peritonitis, seven died at various periods within three years, and one is still living, having survived the operation more than three years. Thus, paracentesis, whilst only a means of palliation, is a proceeding in which no inconsiderable amount of danger appears to be incurred. Ovariotomy, on the other hand, is an operation which, if successful, is assuredly a means for the perfect and radical cure of the disease, but it is undoubtedly a most serious and dangerous operation, though not a painful one.

The first operation for the removal of an ovarian tumour on record, was performed by Dr. M'Dowal, of Dansville, Kentucky, in 1809. The operation was

successful, and the tumour extracted by the large incision; his example was followed by Mr. Lizars, Dr. Graville, Mr. Clay, of Manchester, and Mr. Walne, all of whom performed the major operation. The credit of performing the minor operation is due to Mr. Wm. Jeafferson, of Framlingham, who first performed it in 1826.

Mr. Phillips* gives a table of eighty-one cases, in which are exhibited the names of the operators, the ages of the patients, the nature of the operations, the state of the tumours, the results, and remarks on the cases. The table includes cases operated on in this country as well as on the Continent. In sixty-one cases the tumour was extracted; in fifteen cases adhesions or other circumstances prevented its removal; in five instances no tumour was found. Of the cases in which the operation was completed, the tumour being extracted, thirty-five terminated favourably, the patients recovered; in twenty-six instances the termination was unfavourable, the patients died; in the five instances in which no tumour was discovered, all recovered; of the fifteen cases in which adhesions or other circumstances prevented the extraction of the tumour, nine recovered, six died.

Mr. Phillips very justly remarks, "The proper way of looking at this plan of treatment, is to observe the number of cases submitted to operation, and the number of recoveries after the removal of the tumour. I conceive this to be the fair way, because what has happened already is, in my judgment, likely to happen again. Adhesions may be too strong and extensive to make removal prudent; the tumour may be other than ovarian; or it may be that no tumour can be found. Regarded in this light, it appears that the operation has been performed eighty-one times, and that in thirty-five instances the patient has recovered after the extirpation of the tumour. It is true that forty-nine patients survived gastrotomy, but many of them were subjected to such a painful and dangerous operation, on the one hand without necessity, and on the other without being disembarrased of the disease."

Mr. Phillips has made two tables, in order to estimate the relative advantages and dangers of the major and minor operations,—one including the cases in which the tumour was removed entire, the incision having an extent of six inches and upwards; the other, including those cases in which part or the whole of the fluid was evacuated before the extraction was attempted, the length of the incision having been under six inches. Of the former there are fifty-five cases, twenty-three of which were successful; of the latter there are twenty-nine instances, of which thirteen proved successful.

According to Mr. Lee,† the number of cases that have now been operated on amounts to 103, and the success is in proportion of 1 to 3¼. Dr. Simpson‡ says, the diseased condition of the ovary to which the operation of ovariotomy was peculiarly applicable, if applicable at all, was, in his opinion, that form of ovarian dropsy which was by far the most frequent of all, and consisted in multilocular cystic degeneration of the organ, the gelatiniform or areolar cancer of some authors. All other forms of ovarian dropsy (as they were called,) were rare in comparison to this, and to it all the remarks in such a discussion as this principally or entirely applied. In most instances, (in nine cases out of ten,) this species of ovarian dropsy pursued, he believed, a regular progress onwards towards greater or less enlargement; insufferable distension; more or less repeated palliative tappings; frequently disintegration of the morbid structure; local irritation; constitutional exhaustion, and death. Generally it took a series of years to run its course, but sometimes it passed through its phases and progress more rapidly.

In the practice of Dr. Frederick Bird, the ages of the patients have ranged between 18 and 22, 35 and 45; one only being above 50 years of age.

In the consideration of these cases the following points arise:—

1st. Can we determine with certainty whether a tumour be ovarian or not? If not, have the failures been so frequent as to constitute a reason why the operation should not be attempted?

2nd. Supposing a tumour to exist and to be ovarian, can we ascertain the nature of its contents, as well as its connections? If not, have the failures been so many as to be an objection to the adoption of the operation at all?

3rd. Are the results of this plan of treatment sufficiently favourable to justify us in preferring extirpation to any other mode of treating ovarian tumours? and if so, what plan of operation promises most success?

The fact adduced in proof of the uncertainty of ovarian tumour is, that out of eighty-one instances in which the operation for extirpation was attempted, in five cases at least, in which the abdomen was laid open, no tumour was discovered, and in six cases the tumour was not ovarian.

With regard to the second point for enquiry, Mr. Phillips says, "we have no certain means of ascertaining the contents and connections of tumours presumed to be ovarian." In six cases the abdomen was laid open, and the tumour was found to be diseased omentum, or diseased or gravid uterus. Many times a presumed ovarian cyst has been punctured, and no fluid has escaped, for it frequently happens that the fluid is of the consistence of a thick jelly.

With reference to connections or adhesions, the difficulties met with are still more formidable. In fifteen cases in which the operation for extraction was commenced, it was found necessary to discontinue it, in consequence of the extent of the adhesions. In twenty-five other instances adhesions existed. Of the fifteen cases in which they caused the abandonment of the operation, six terminated fatally. The adhesions are rarely extensive without previous symptoms of peritonitis, (in the above case they must have been very extsnsive, from the numerous tappings the patient underwent;) but allowing the extirpation of the diseased ovary to be a justifiable operation, it may be presumed that in the absence of these symptoms it may be

* Med. Chir. Transactions, Vol. 9.
† Jacksonian Prize Essay.
‡ Report of a debate at the Medico-Chirurgical Society, Edinburgh.

undertaken with every prospect of being completed, and the operator may find encouragement in the fact furnished by Mr. Phillips' tables, that of the forty cases in which adhesions were found, twenty-six survived, which is at the rate of sixty-one per cent.; whereas of the whole eighty-one operations, forty-seven recovered, or fifty-eight per cent.

The great danger of this operation arises from peritonitis, and as far as our present experience warrants a conclusion, that danger is not increased by previous inflammation of the serous membrane and its consequent adhesions, though their existence necessarily leads to greater disturbance of the important parts exposed in the operation.

In reference to the third point, sufficient has been said in the preceding observations on paracentesis and extirpation. With regard to which operation should be selected, the calculations from the table before noticed, tell rather in favour of the minor operation; but my firm conviction is that the operation is never justifiable except when the swelling, either from pressure on the diaphragm, or from some other cause, is placing the life of the patient in extreme jeopardy.

Mr. Kirkpatrick* relates a case of a patient labouring under ovarian dropsy who had been tapped 128 times. The patient died of an attack of pleuritis, the interval between the last operation and her death being eight weeks.

In addition to the usual symptoms and method of investigation in diagnosing this disease, Dr. John Hughes Bennett speaks of two other methods which seem to be capable of greatly assisting the practitioner in his efforts to form a correct opinion of the case:—1st, the uterine sound recommended by Professor Simpson; 2nd, a microscopical examination of the fluid removed by paracentesis. By fixing the body of the uterus with the sound, and by elevating, depressing, or bringing forwards the handle of the instrument, both the anterior and the posterior portions of the fundus may be felt, with the left hand above the pubis, through the integuments. The information is negative, but it becomes of immense importance when the question arises, whether the tumour is uterine or ovarian. By pushing the tumour from side to side, we are enabled to act upon the ovary, and to determine, by the impulses communicated to the hand, whether the tumour be on the right or the left side, and to form a tolerable idea, in certain cases, whether it be free or attached. By this instrument, then, we are assisted in resolving the *seat* of the tumour. The microscopic examination of the fluid removed by paracentesis is capable of being made highly serviceable in diagnosing the *nature* of the tumour.

In this fluid, flocculi exist, which are not composed of lymph as was at first supposed, but of numerous cells, varying in size from the 1-100th to the 1-40th of a millimeter in diameter. They are slightly granular, of round and oval shape, unaffected by water, and exhibit a distinct nucleus about 1-140th of a millimeter in diameter. The indented cells are imbedded in a granular matter, which can be easily broken down. They thus resemble those which constitute the epithelial surface of certain membranes. The cysts in the diseased ovary are lined by a delicate membrane, covered by nucleated epithelial cells, and there is no difficulty in identifying the corpuscles seen in the fluid with those observed lining the cysts. In one case which Dr. John Hughes Bennett examined, masses of these had evidently separated, and floated into the abdominal cavity through perforations in the external sac of the ovarian tumour. In another case none of these corpuscles could be discovered, but only shapeless flakes mixed with granules; after death the tumour was found to be fibrous throughout. In another case the cells were of the character above described, combined with the débris of a fibrous structure, from which it was inferred that the external envelope of the tumour was in a state of decomposition. On examination after death, a compound encysted tumour of both ovaries was found, with sloughing of the fibrous sac on one side, and a colloid cancer of the omentum and peritoneum. There is little danger of the fluid accompanying encysted ovarian dropsy being confounded with that found in inflammatory or passive dropsy. In peritonitis we find primitive filaments mixed with plastic or pus-corpuscles, which can never be mistaken for the large epithelial cells observed in the fluid of ovarian dropsy.

In reference to the above case, when we take into consideration the existence of numerous and firm adhesions by reason of the frequent tappings the patient underwent, as well as her advanced age, we may conclude that Mr. Cox was quite justified in refusing to propose to the patient the very doubtful chance of a cure offered by the operation of extirpation. The patient may now live for some length of time in tolerable comfort.

* Dublin Hospital Gazette, Feb. 1, 1846. p. 187.

ST. PANCRAS DISPENSARY.

CASES ILLUSTRATIVE OF THE CONDITION OF THE SYSTEM WHICH IS ACCOMPANIED BY OXALIC URINE.

By Edward Ballard, M.D., Lond., Physician to the St. Pancras Royal General Dispensary, and Medical Tutor in University College, London.

Case I.—Hypochondriasis.

J.T., aged 56 years, a native of London, where he has all his life resided, a silversmith by occupation, when in health of a very cheerful disposition, and having no hereditary predisposition to disease, applied at the Dispensary, on January 20th, 1846. When young was very irregular in his mode of living, and suffered from a chancre which was not followed by any secondary symptoms. For several years past, however, and since his marriage, he has lived very temperately; has been subject to external piles for twelve years or more; has never lost any blood by the rectum till lately. He attributes his present illness to domestic troubles and a habit of neglecting his meals for the sake of indulging a taste for reading, &c. He reads medical books when they come in his way.

He presents the very picture of a hypochondriac, appearing unable to concentrate his attention on anything but his own ailments, in the description of which he constantly employs medical technicalities. Is an habitual and close observer of the state of his tongue, pulse, and stools, the minutest variations in which fill him with alternate hope and apprehension. His countenance expresses despondency and gloom. It appears from his own account, that his illness has lasted for three years, having commenced with occasional attacks of flushing of the face and head, and giddiness, with vomiting and diarrhœa, the latter however, six months ago, having been changed for obstinate costiveness, which has continued to the present time. He states that when his bowels are confined he is much more comfortable in his feelings than when they are open. A month ago he lost some blood by the rectum; the hæmorrhage lasted five or six days and has not returned; has lost strength considerably during his illness, and finds his memory failing him daily. It is with difficulty that he gets to sleep at night, and when he wakes, which is always early, he feels so excited that he is compelled to rise and engage in some occupation about the house; if he can find nothing to do he smokes. Has had some cough for the last six months. The chief part of his complaints, however, are referable to the abdomen, consisting in a "miserable sensation of pain and opression," over the lower part of that region and round the navel, especially after his stools, so that he voluntarily suppresses them as long as possible. His tongue is large, white, and irregular at the edge, and his appetite ravenous. He is an inveterate snuff-taker; and has had an inguinal, but reducible hernia for some years. Says he cannot take opium as it makes him extremely ill. Ano applic. Hirudines iv.

R. Camphoræ, gr. ij.; Pil. Saponis, Co., gr. iij. Fiat pilula nocte maneque sumend.

R. Acid. Nitric. Dil., Tinct. Hyosc., utrq., m. xv.; Inf. Serpentariæ, oz. iss. Fiat haust. ter die sumend.

Jan. 23rd. Abdominal pain relieved; sleeps better at night. Auge Pil. Sap. Co., ad gr. v.; et Acid. Nitric. Dil. ad m. xxv. Confect. Sennæ pro re nata.

26th. No oxalic or phosphatic deposit in urine of yesterday. Omitt. haustus.

27th. Continues improved; passes good nights, and is less excited in the mornings. Keeps his bowels regular either with castor oil or the confection of senna. Urine is cloudy, with a slight cloud in addition at the bottom of the glass; the latter contained an abundance of moderate-sized octohedra; re-action acid; specific gravity 1020. Pergat.

30th. Has some trouble in regulating his bowels, and still expresses great anxiety about their condition. His spirits are much improved; urine passed this morning is of a natural colour, and throws down a dense mucus-looking deposit, containing lithate of ammonia, along with minute octohedra. Pergat. Capt. Ol. Ric., dr. j. vel ij. loco Conf. Sennæ.

Feb. 3rd. All his abdominal symptoms improved; complains again of a difficulty in getting to sleep at night, and of strange visions passing rapidly before his eyes; urine contains no oxalates nor phosphates, and only a little lithate of ammonia in the deposit. Auge Pil. Saponis Co. ad gr. viij.

6th. Complains of throbbing pain in the head, especially in the right temple; bowels regular, and defæcation is not followed by any uneasiness. Urine of this morning natural in colour, slightly acid, of rather low density; on standing twenty-four hours it threw down a slight cloudy deposit, containing mucus-corpuscles, epithelium scales, and a few octohedra. Auge Pil. Saponis Co. ad gr. x.

10th. States that he feels weaker than he did; suffers more from flatulence; urine acid, of specific gravity 1020; after standing twenty-four hours it threw down a slight mucus-looking deposit, which contained a few mucus corpuscles and a tolerable sprinkling of small octohedra.

Pergat. Assafœt., gr. x., ter die sumend. Capt. cum sing. pil. dosibus Inf. Cascarillæ, oz. iss.

13th. Continues to improve; bowels open without medicine; urine acid, of specific gravity 1031; deposit as before, but with fewer oxalates. Pergat.

17th. In consequence of taking some bacon and eggs on the 15th, has suffered more from flatulence and uneasiness at the lower part of the abdomen. Sleep continues good; urine acid, of natural colour, with a moderate rather dense deposit, consisting of lithate of ammonia and a few octohedra, more than in last specimen, of specific gravity 1031. Capt. pil. omni nocte tantum.

19th. Intends trying if he cannot resume his work. Urine presents a dense flesh-coloured deposit, consisting of lithate of ammonia; when warmed and diluted, the lithates were dissolved and a mucus-looking cloud remained, which consisted of octohedra mostly very minute; specific gravity 1025, re-action acid. Discharged.

Remarks.—Whatever be the relation in which the abdominal ailments and the mental derangement of a hypochondriac stand to each other, it is commonly found that improvement in the one is followed by amendment in the other. In this case the abdominal symptoms were urgent, and the intense attention directed to them by the patient appeared to indicate that they must be here at least the special object of treatment. How relief was to be obtained, was partly pointed out by an imperfect attempt on the part of the system to effect it by hæmorrhage, and accordingly leeches were ordered to be applied to the anus, while opium disguised and corrected by combination with camphor, was prescribed to alleviate the irritable condition of the nervous system. That this mode of treatment along with gentle laxatives was effectual, the issue of the case proved; for although the man was necessarily discharged in far from a healthy state, his improvement was in every respect marked.

A few words on the urine. The cases of oxaluria which have come under my notice have led me to infer that when the presence of oxalate of lime is observed along with symptoms of nervous irritability, they are related rather as concomitants than as consequent, the one upon the other; both being referable to the same debilitated condition of the constitution, the former especially, being taken as an index of the deep impression which has been made upon it by the prolongation either of disease or of other weakening causes. It is

in this light that I am disposed to regard the present case. The patient had long suffered from diarrhœa, and had been in the habit not only of neglecting his meals, but as he also informed me, of taking merely coffee and bread and butter, or some bacon, in place of more nourishing food, day after day, in order that he might have the privilege of reading the periodicals in the coffee-room he frequented. These circumstances, conjoined with sedentary habits, and the re-action which followed on mental annoyance and excitement, were amply sufficient to account for his state. There was considerable variation in the size and amount of oxalates in the progress of the case; on two occasions they were altogether absent. On the whole they became less abundant as it advanced.

Case II.—Melancholia.

S. E———, aged 23 years, a native of, and resident in, London. None of her family have presented indications of consumption or insanity. Up to three years ago, with the exception of habitual costiveness, she had had no illness worth speaking of. At that time she suffered from anasarca, the face, as well as the upper and lower extremities, being swollen, accompanied by fever. This lasted for a day or two, and left her very much weakened. She had pain across the loins, but the urine was not bloody. Has been losing flesh and strength ever since. I was requested to visit her on September 21st, 1846.

She had always been of a quiet and reserved manner, and religiously but not fanatically disposed, but for the last twelve months has been observed to become more reserved than ever, neglecting her usual occupations, and appearing to be absorbed in thought. Her friends have reason to believe that this change in her demeanour has been due to the loss of a favourite mistress, on whom she had been in the habit of attending during six years. The sister of that lady she is now living with, and the girl appears to labour under the imagination that she has committed murder, and that her mistress is fearful to be in the house with her alone lest she should injure her also. She says that her crimes are very black, and that all the sermons she hears are directly levelled against herself. She has lately fancied that she was going to prison, and sometimes is very much agitated about it. She has lost flesh to some amount during her illness, and complains of feeling very weak; face flushes towards evening, and she then becomes very drowsy; has occasional headache, but no throbbing of the carotids. Her manner is rather timid, but polite, answers any questions put to her, but looks out of the window the whole time, never turning her head unless requested to do so. Bowels confined; tongue flabby, rather tremulous, with a thin white fur; pulse 75, rather weak; catamenia have always been regular. The peculiar turn of her delusion may be due to her having been in the habit lately of reading law-books which have lain in her way.

Ordered a nourishing diet, with malt liquor. Pil. Coloc. Co. gr. x., alt. quaque nocte sumend. R. Bebeerinæ Sulph., gr. iij.; Extr. Gent., q. s. pro pil. ter die sumend.

September 22nd. Morning's urine rather pale, slightly cloudy, presenting a slight additional cloud at the bottom, of specific gravity 1023, moderate acid re-action; the cloud at the bottom contains a scanty sprinkling of octohedra, and, in addition to these, some circular thin plates, marked with concentric lines. No albumen present.

24th. Her mother thinks that she has appeared better, and less melancholy. Has been copiously purged; thirst considerable.

26th. Catamenia appeared this morning; urine of this morning rather pale, but clear, with a cloud-like deposit, of specific gravity 1016, moderate acid re-action, deposit contains no oxalate.

Capt. Pil. Coloc. Co., gr. v., tantum. Contin. Pil. Bebeerinæ.

October 2nd. Has complained of headache and languor the last two days; mental condition not much improved; sometimes talkes nonsense. Pills acted three or four times.

Omitt Pilulæ Bebeerinæ. Capt. Pil. Coloc. altera quaque nocte tantum. R. Ammoniæ Sesquicarb. gr. iij.; Tinct. Lav. Co., dr. ss; Inf. Carcarillæ, oz. iss. Fiat haust. ter die sumend.

15th. Since taking the last medicine she has been free from headache, and has lost her thirst; she feels a little stronger, and appears in rather better spirits, but otherwise is not improved; bowels have not acted for seven days; this morning's urine is clear, containing a few floating very light cloud-like flocculi, which on standing separated into a light cloud-like deposit, occupying a quarter of the liquid, and consisting of single and aggregated octohedra, with scales of epithelium, of specific gravity 1029, very feebly acid, no albumen.

Contin. haust. R. Olei Crotonis, gtt. iij.; Micæ panis. q. s. pro pil. xij. Capt. j., omni nocte.

28th. Spirits have improved very much, and she is more disposed to laugh and joke than formerly; is always better in the evening; does not talk nonsense, but after going to church on the 25th insisted that her mistress had been instructing the clergyman to preach against her; is still indisposed to rise in the mornings; has a slight cough; bowels open; stools very offensive. Aspect of urine as before; the cloudish deposit only occupies 1-10th, but contains a great many minute octohedra, some mucus-corpuscles and granular matter; no albumen; specific gravity 1025.

To leave home for a time. Discharged.

Remarks.—The termination of this case was not seen. Cases of insanity are not commonly met with in dispensary practice, and when they do occur, the most valuable means of treating them are withheld by the circumstances of the patient. Moral influences can in no way be brought to bear upon the disease, and the body is the only channel through which the physician is permitted to act upon the mind. The subject of these observations, although removed from her situation, was thus, notwithstanding my injunctions to the contrary, permitted to have occasional interviews with the fellow servants and her mistress; and after every such meeting, a distinct increase of her gloominess was remarked. Her mother, too, took no pains to withdraw her mind from the contemplation of scenes

on which it so morbidly dwelt. Accordingly, although daily out-door exercise was enjoined, and it was otherwise endeavoured to restore the tone of the system, the success was by no means what (under more favourable circumstances,) might fairly have been looked for. As in the former case, the oxalic urine was connected, not only with marked derangement in the functions of the nervous system, but also with a depraved condition of the general health. Indeed, had it not been for the debility which for two years had preceded the death of her mistress, it is probable that this event, deplored as it would still have been, by so affectionate a disposition, would have lost its freshness with the progress of time, and that her mind would not have given way under the shock. I do not know whether much stress is to be laid upon the disappearance of the oxalates at the catamenial period. I have noticed the same thing in another instance. Two other points relative to the oxalates in this case deserve notice; one of these is the form of the deposit on the 15th of October, and the mode in which it fell. I have reason to believe, from the result of 139 observations on this species of urine, that this is the form which oxalate of lime most commonly presents when falling at a distinct precipitate. Lime, either alone, or mixed with crystals of uric acid, or some epithelium scales, occurred in ninety-two instances. The other point to which I desire to allude is the occurrence of what I imagine to be a form of oxalate of lime, hitherto undescribed, although I know that others have noticed it in circular thin plates about the 1-700th of an inch in diameter, some larger, and some much smaller, generally having somewhat of a bluish tinge, and being more or less distinctly marked with connective lines. I have met with these plates ten times, and with three exceptions, always in conjunction with octohedral crystals.

Perhaps a few words may not be out of place upon one of the remedies employed in this case, the sulphate of bebeerina. To such as have used it little need be said in its praise; to those who have not, I may state that for the last twelve months I have employed it with the most beneficial effect in the dispensary practice, as a substitute for quina, and almost to the exclusion of that alkaloid. It is about half the price, and its medicinal value so far as I can judge, is equal to it. It was introduced into practice in this country by Dr. Maclagan. It may be administered either in a pill with extract of gentian, or after dissolving in boiling water, along with a few drops of sulphuric or hydrochloric acid, in a draught. As in the present instance, it is apt to produce thirst, and sometimes it acts upon the bowels.

Since writing the above, I have accidentally heard that this patient's mental condition is scarcely at all improved to the present time. She spends a considerable portion of the day in bed, refusing to get up, and will allow no medical man to see her.

(To be continued.)

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, JULY 14, 1847.

The arduous nature of the duties which devolve upon medical practitioners,—the long and comprehensive course of study which is required to fully qualify them for the discharge of these duties,—the continual application necessary to keep up with the advance of knowledge,—the closeness of observation, the hours of thought and watching in the closet and by the bed-side, indispensible to successful practice,—the responsibilities which attach to them,—finally, the devotion and self-sacrifices required of them, cannot fail to be apparent to the reflecting mind. The qualifications necessary to form a well-instructed and skilful physician or surgeon are not those of the million. They require for their attainment a combination of mental acquirements, energy, and perseverance, with which comparatively few are endowed; and yet, though this is a truth which will probably not be questioned, and though it is admitted that the labourer is worthy of his hire, it is in a literal sense the hire of the mere labourer which is apportioned to the reward of such services as men thus qualified are called upon to bestow.

No one questions either the value of these services, or the necessity which exists for securing them to all classes of the population not in a condition to obtain them for themselves. The state provision made for efficient medical attendance in the army and navy, and in Poor-Law unions, and the numerous charitable medical institutions throughout the country, hospitals, dispensaries, &c., are sufficient evidences of the estimation in which the advice and assistance of medical practitioners are held. Yet, notwithstanding, we will venture to assert, that with the education and station of gentlemen, and intellectual qualifications, not inferior to those of any class of the community, the entire revenues of the profession derived from the emoluments of practice are not sufficient for the support of one fourth of their number.

We have been led to these reflections at the present moment by a consideration of the memorial lately presented to the Lord Lieutenant of Ireland, signed by upwards of one thousand physicians and surgeons of that country. This memorial was published in our last number, and is worthy of deep attention, as shewing what sacrifices are required from the medical profession, and in what consideration such sacrifices are virtually held by the Government. Five shillings *per diem* is, it appears, considered a fitting remuneration

for a qualified physician in undertaking the responsibilities, the labour, and the danger inseparable from the charge of a large fever-hospital, crowded with patients, and overflowing with infection; while the workmen who are employed on the building,—bricklayers, carpenters, painters, &c.,—are absolutely paid for their mere manual labour at a higher rate. We had intended to extend these considerations to what is going on on this side of the Channel, where the medical officers of unions in Liverpool and other large towns, lately visited by contagious fever, have been in like manner bestowing their services and their time, and sacrificing their lives, receiving in return, at the hands of Poor-Law authorities, a similar amount of grateful consideration; but we are compelled, by want of space, to postpone the questions which arise until another occasion, when we purpose to review the entire subject of public medical remuneration, together with its bearings on the *status* and prospects of the members of the profession.

Reviews.

Practical Observations on the Pathology and Treatment of certain Diseases of the Skin, generally pronounced intractable. By THOMAS HUNT, M.R.C.S., Eng., L.S.A., &c. London. 8vo. pp. 156.

Some months ago the author of the present work directed attention in this Journal to a method of administering arsenic in some intractable forms of skin disease. We have here an amplication of his views, with more precise directions as to the use of this remedy, and illustrated by details of cases, exemplifying its powers and the general indications for its employment.

The employment of arsenic in chronic cutaneous affections is no new practice, but the directions given for its use by Mr. Hunt, are very different from those generally laid down by preceding writers, and approximate rather to the method followed in prescribing alterative doses of mercury, where the intention is to produce an alterative action, without affecting the system so decidedly as to bring out the more evident effects of the mineral on the salivary glands. Accordingly, in the same manner, as the tender state of the gums, induced by the prolonged action of small doses of mercury, becomes at once an evidence of the system being brought under the influence of the medicine, and an indication for the diminution of the dose, so in like manner is the effect produced on the conjunctival membrane of the eye by the lengthened use of small doses of arsenic, an evidence of the system being brought under the influence of this remedy, and an indication also for reducing the dose.

The usual mode of administering arsenic is, as our readers well know, to commence with very small quantities, gradually augmenting them until the stomach shews that a further increase in the dose of the poison can no longer be borne, and the tolerance of the mineral is exhausted. Its exhibition is then stopped, and if the disease for which it had been given should fail to be alleviated, the remedy falls into disrepute for what has rather been an error in the mode of administering it, and the case, usually one in which numerous other remedial measures have been previously tried, is pronounced obstinate, intractable, perhaps incurable.

One great merit of the practice recommended by Mr. Hunt is, that it accords with the *rationale* of the action of other medicines of a like character; and we are so much in the habit of using medicines empirically, to produce an immediate and specific effect, and are so little acquainted with the physiological action or *modus operandi* of almost all of them, that any contribution to our knowledge of the action of medicinal agents on the general system is fraught with instruction and benefit, the ultimate results of which indeed can scarcely be calculated.

The administration, then, of arsenic, is these minute doses, (five drops of Fowler's solution, three times daily, with, or shortly after, the meals,) seems well calculated to insure its absorption and diffusion through the system. Given in this manner it may be expected gradually and safely, as far as the tolerance of the mineral can be established, to induce those alterative changes in the blood, and through that on the organism, which its individual properties enable it to effect. The point of tolerance is, it seems, indicated by the action on the conjunctiva, an inflamed state of that membrane being after a time induced. The dose of the medicine must then be lessened, perhaps, for a time, the use of it altogether discontinued, to be again resumed in smaller quantities, and its influence kept up for weeks or months, until, as in the case of cutaneous diseases, the morbid disposition is counteracted or destroyed by the prolonged use of the remedy. This is, in brief, a summary of the history of Mr. Hunt's cases, and among those special affections which have yielded to the constitutional influence of arsenic thus induced, the most satisfactory instances will be found in those well-known opprobria medicinæ,—prurigo, lepra, psoriasis, eczema, acne, and even lupus.

The failures of arsenic as an internal remedy for cutaneous affections is attributed by the author,—1st, to the syphilitic characters of many of these cases being overlooked,—arsenic is prescribed when mercury is wanted; 2nd, to its being administered during the inflammatory or febrile stages of the disease; 3rd, to the exhibition of the remedy on an empty stomach, when it is frequently obliged to be abandoned from the gastric irritation excited; 4th, to the doses in which it is ordered being too large, and the intervals too distant; and lastly, the most common and most serious error of all, the giving it in *gradually increasing doses*.

The properties of arsenic to be kept in view in its medicinal action on the system are, according to the author—1st, its cumulative character; hence the necessity for avoiding the common practice of gradually increasing

the dose to the utmost verge of toleration by the stomach. 2nd. The sudden arrest of diseased action often observable under the administration of the maximum dose. "A full dose being administered at regular intervals, in a few days (or possibly weeks,) a pricking sensation is felt in the tarsi, and the conjunctiva becomes slightly inflamed. *At this crisis the disease is brought under arrest, and generally from this period appears to be shorn of its strength.* The return of healthy action in the cutaneous vessels often becomes visible, and is sensibly felt by the patient, on the very day on which the eyes become suffused with tears." 3rd. The effect of an over-dose on the nervous system, producing for a lengthened period subsequent intolerance of the medicine even in the smallest doses, 4th. That while in large doses it irritates the bowels, in small doses it soothes them, tending to check the diarrhœa and gastric irritation, which frequently accompany skin diseases. And lastly, that the susceptibility of some individuals to the influence of arsenic, is so great as to amount almost to complete intolerance, and that yet in persons of this description, suffering under diseases of the skin, in very greatly reduced doses it proves equally beneficial in curing the disease, as in those of ordinary susceptibility.

The treatise is divided into four sections: the first is devoted to the introductory observations; the second contains cases illustrative of the use of arsenic according to Mr. Hunt's method; the third contains some general observations on the cases in the preceding section; and in the fourth is considered the important questions, "Are local diseases ever salutary to the system at large? and are there any cases which cannot be cured without risking the general health?

In reference to this last subject, the author lays down the following propositions:—

"I. Local disorders of local origin may be safely treated locally, if the general health be sound.

"II. Local disorders of constitutional origin cannot be treated locally without risk.

"III. Disorders of mixed origin, partly constitutional, partly local, require—first,—general, afterwards local treatment."

The observations introduced in the discussion of these propositions are highly judicious, and the entire section is worthy of attentive perusal. Although indiscriminate local treatment is justly censured, and the use of local applications discouraged, in many of those affections in which they have very generally been had recourse to, it should be observed that the author does not omit to call to his aid those other adjuvants in the general treatment of chronic cutaneous diseases which the symptoms indicate.

In concluding these remarks, we have only to add, that we consider Mr. Hunt's mode of administering arsenic as an alterative, a rational practice, and worthy of extended trial, not only in chronic cutaneous disease depending on constitutional causes, but in other constitutional diseases, in which benefit may be looked for by impregnating the system with this powerful agent.

The Half-Yearly Abstract of the Medical Sciences. Edited by W. H. Ranking, M.D., Cantab., late Physician to the Suffolk General Hospital. Vol. V. January—June, 1847. pp. 413.

This volume of Dr. Ranking's Abstract contains the usual amount of selections of the more important contributions in practical medicine, systematically arranged under the several heads of—I., Practical Medicine, Pathology, and Therapeutics; II., Surgery; and III., Midwifery, and Diseases of Children. To these are added three Reports on the same subjects, by the Editor and Mr. Ancell; a Report on Pathological Chemistry, by Dr. Day; a Report on Forensic Medicine and Toxicology, by Professor Guy, and a Report on the Surgical and Medicinal Application of the Vapour of Æther, by Dr. Ranking. In Mr. Ancell's report on the Progress of Surgery, there are special sections on Venereal Diseases, and on Aural Surgery.

The Editor's report on the Inhalation of Æther will be regarded with peculiar interest. Our present object will be attained by quoting the concluding sentences which embody the result of Dr. Ranking's deliberate examination of all that has hitherto been adduced in favour of and against the practice:—

"We now bring our report on the subject of ether-inhalation to a close, and in doing so, beg to guard ourselves against the imputation of a premature admission of all that has been said in its favour. In the criticism we have thought it right to make upon the various objections which have from time to time appeared, our sole intention has been to point out the *non sequitur* style in which the adverse argumentation has been conducted. We do not deny that other and more logical objections may, upon further experience, be justifiably adduced; but we do maintain that up to the present time no evidence of injurious effects has been brought forward, which ought to weigh against the accumulated testimony, in surgery more particularly, which has caused many to regard the introduction of ether-inhalation as one of the most merciful dispensations of Providence."

Proceedings of Societies.

SOUTH-EASTERN BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ANNUAL MEETING.

On Wednesday, the 30th June, 1847, the third Anniversary Meeting of this Branch Association was held at the Town Hall, Reigate, when the following gentlemen were present:—

Messrs. Wallace, of Carshalton; Henry M. Holman, of Hurstpierpoint; Smith, of Crawley; Martin, of Pulborough; Pickance, of Penshurst; Drs. Sibbald and Plomley, of Maidstone; Messrs. West, of Tunbridge; Chaldecott, and Napper, of Dorking; Powel and Turner, of Tunbridge Wells; Giraud, of Faversham; Barrington, of Tunbridge; Pout, of Yalding; Gould, of Wateringbury; Martin, Peter Martin, Steele, and Sisson, of Reigate; Bottomley, and Fletcher, of

Croydon; Drs. Sylvester, of Clapham; Mackness, of Hastings; Forbes, of London; Jenks, of Brighton; Messrs. Cordy Burrows, of Brighton; Harris, of Northiam; Whitfield, of Ashford; Wallis, of Hartfield; Thompson, of Westerham; Stedman, and Napper, of Guildford; Hunt, of Herne Bay; Davies, of York Town, Bagshot; Long, of Barham; Reid, of Canterbury; Hextall Smith, of St. Mary Cray; and other gentlemen, not yet members of the Association.

Dr. Sibbald, the retiring President, having taken the chair, addressed the meeting to the following effect:—

On retiring from the office which your kind partiality assigned to me last year, I shall delay the proceedings of this meeting for a very few moments only; for there will doubtless be much interesting matter to engage your attention during the short period for which we have met, and I should not readily be excused, if I were needlessly to trespass on the valuable time required for the special business of this meeting. That I have been considered as worthy to occupy this chair I feel as a high distinction. Your approbation gives real eminence; and to merit your favourable opinion I hope is a pure and rightly directed ambition. I beg to offer my congratulations on the appointment of my worthy successor, Mr. Wallace, to whom, with the greatest pleasure, I shall resign my office.

The minutes of proceedings at the Ashford meeting were then confirmed by the present meeting, and signed by Dr. Sibbald, who then left the chair, and handed in Mr. Wallace, who addressed the meeting as follows:—

Gentlemen,—The kind partiality of friends, rather than any merit of mine, has placed me in this chair; and I throw myself on your indulgence, when I request that you will impute my deficiencies, not to my want of zeal to maintain the credit of these meetings, but to my incapacity.

It would be wanting in respect to this meeting, and also imposing restraint on myself, were I not to make you a short address upon the motives which have induced the parent Society to institute these Branch meetings; and, gentlemen, short it must be, as your Committee have arranged that the business of this meeting do cease at five o'clock, in order that the remainder of our time this day may be devoted to social intercourse at the dinner table, to which I trust all of us will be able to adjourn.

Let us bear in mind, gentlemen, the main objects to effect which our Association was established, namely, to communicate knowledge, and to promote social and friendly intercourse. The communication of knowledge has been carried out in an eminent degree by the machinery adopted for that purpose; and nothing further was required to make it perfect. But in order that social and friendly intercourse might be rendered more available, Branch Associations have been established, as the Parent Society considered, and considered very justly, that the more such intercourse was promoted the greater would be, not the attainment of knowledge merely, but also the elevation of character and consequence of the medical practitioner in his own eyes as well as those of the public. That such intercourse cannot but produce these good effects, and has already produced them, I need only call to your recollection the last Anniversary of this Branch held at Ashford, which was attended by a considerable number of medical men who, for the talent, and for the acquirement which they displayed, and also for gentlemanly conduct, would have done honour to, and have raised the character of, any class of persons how high soever their station might be. And when some of us are able to recollect the change which has taken place in the last thirty years, we may impute this highly gratifying manifestation of improvement, partly to the advancement of knowledge in society generally, partly to the obligation to observe a more severe course of preliminary study, and also to that social intercourse which medical men have enjoyed during that period, and which, such meetings as ours, this day, tend in an eminent degree to advance—for not only is the knowledge of all increased by the medical cases reported, and by the observations which they call forth, but also a stimulus is given to induce us to prove ourselves worthy of such association. But, gentlemen, the beneficial effects of these meetings do not stop at this point; I consider that a great moral good is effected. We are led by such intercouse to respect and esteem those whom, but for these meetings, we should know nothing of; and, by comparison, to think less well of ourselves. We leave these meetings wiser and better men.

Medical Reform is at this time so engrossing a subject that it cannot entirely be lost sight of; and although I hope and trust that this meeting may not become the arena of political discussion, I would merely remark that we have cause to congratulate each other on the higher degree of estimation in which the medical profession is held by Parliament, and by the public, at this time than formerly. This is attributable to the advancement of medical men in all that adorns the scientific gentleman, and also, in no small degree, to the good feeling which exists amongst them, of which the public soon become well aware—and the more conspicuous these qualities are rendered, the sooner will the Legislature do us all justice. Therefore let us go on in the course which we are this day pursuing, and let the meeting at Reigate not fall short of the high estimation in which the Ashford meeting is held. Let it be our constant endeavour to suppress all unworthy sentiments as respects each other, and to encourage every kind and friendly feeling, and let that be said of us which was said by the Pagans, of the early Christians, and which tended mainly to advance their views, "See how these Christians love one another."

REPORT.

The Committee of this Branch of the Provincial Medical and Surgical Association, beg to report as follows:—

Since our last Annual Meeting at Ashford, it was approved by an unanimous resolve of the great meeting of the Parent Association at Norwich, that the whole of the counties of Kent, Sussex, and Surrey, should be included in the South-Eastern District, as being of convenient form and size; with the probability that the Annual Meetings thereof would be so appointed, that every member residing in those counties might be enabled to attend them, without the necessity of very long journeys, or of being absent from home more than one entire day.

This resolution of the Parent Association, grounded on one of our own adopted at the Ashford meeting, has been communicated by the Secretary to every member residing in the three counties, not previously a member

of the Branch; and some have, in accordance with it, expressed their wish to be considered as members of the Branch, but others have not done so, and it is of course entirely optional.

Soon after the annual meeting at Ashford, that is to say, on the 15th of July, the Secretary wrote to almost all the offices of the highest eminence established for purposes of life-assurance, seventy-six in number, enclosing copies of the resolution adopted at that meeting on the refusal of these offices to give any fee or remuneration for opinions and statements required of medical men respecting the health of their patients applying for life-assurance.

To these applications your Secretary reports that he received not more than three or four answers, expressing the readiness of those three or four offices to give fees in return for compliance with their requests. The others took no notice of his application.

Since our last meeting three important contributions to medical literature have appeared from members of the South-Eastern Branch.

Mr. Hunt, of Herne Bay, has long devoted much attention to the difficult but interesting subject of diseases of the skin; and he has given his views on the subject to the profession in a volume just published. Mr. Hunt considers a variety of chronic and intractable eruptions to be manifestations of one disease of the general system, and to be amenable to one general plan of treatment. Arsenic has been long known as the most powerful alterative applicable to skin diseases; but Mr. Hunt appears to have met with unusual success from its use in small and long-continued doses after a preparatory antiphlogistic treatment. Mr. Hunt's experience teaches that few cases of lepra, psoriasis, eczema, impetigo, and other chronic eruptions, fail to yield to a well-directed arsenical treatment.

Few subjects are more interesting and important to the medical practitioner than that of medical ethics; and it should more especially engage our attention at the present time, when the altered state of society, and the great advancement of education have in a great measure removed the ancient land-marks of professional distinction, while legislators have hitherto failed in their endeavours to establish new ones. The Committee consider the "Akesios" of Dr. Mackness to be a valuable contribution to this branch of medical literature. It is not only required of the accomplished physician or surgeon that he should be able accurately to diagnose disease, and to direct the remedies for its cure; a right consideration of the "moral aspects of medical life" is of the utmost importance to his successful career, and to his general usefulness. We may say, with some complacency, that in the performance of its duties towards society, no profession shows fewer instances of failure than our own. It is in the internal intercourse of medical men that an improvement is most to be desired. The examples of the great men who are addressed in the elegant letters of Dr. Marx, will not be lost upon us. The important topics treated in the commentaries of Dr. Mackness, will receive attentive consideration; and in the biographies of Cheyne, Gregory, Pinel, Lettsom, Desgennettes, and Boerhaave, every practitioner will find instructive lessons which should guide him in his conduct to his patients, to society, and to his medical brethren.

In the year 1844, our associate, Mr. Edwards Crisp, of Camberwell, received the Jacksonian prize of the College of Surgeons, for an essay on the diseases of the great blood-vessels. This essay has now been expanded by Mr. Crisp into a volume, containing a most complete and trust worthy account of the state of our knowledge on this most important subject. The author has collected a very large number of facts respecting the diseases and the wounds of arteries and veins; and applying the numerical method to the analysis of these facts, he has arrived at several important and valuable deductions. In particular, it may be mentioned that in cases of external aneurism, Mr. Crisp considers a large amount of success may be expected from the careful application of pressure, when the situation of the disease admits of it, and that in cases of popliteal aneurism, and of aneurism at the bend of the elbow, pressure will in a majority of cases prevent the necessity of an operation. If the responsibility of a provincial practitioner is great in the daily routine of practice, it is unusually so with reference to wounds of arteries. A thorough knowledge of the subject, as well as presence of mind to apply that knowledge, are indispensable; and the Committee strongly recommend the study of Mr. Crisp's work to those who desire to be prepared for *more* than the "ordinary emergencies" of practice.

In reference to the Benevolent Fund attached to this Association, the Committee beg again to recommend it to the consideration of members; although perhaps no cases of destitute widows and orphans of medical men occur in this district, which are not sufficiently attended to, numerous cases do occur in other parts of the kingdom, well worthy of the sympathy and pecuniary assistance of members. A small contribution from each member would be well and worthily applied.

Your Committee would neglect an important duty if they did not allude to the subject of medical reform—a subject peculiarly interesting to us all, because, while the Profession continues in its present unsettled state, it is a source of perpetual discussion and vexation. It were greatly to be desired, that some legislative measure could be devised, which would allay and set at rest this uneasy state of the medical mind; so that we might apply ourselves exclusively to the science and the practice of our profession. But after mature consideration, your Committee are of opinion that this can never be accomplished until the general practitioners are incorporated by royal charter into a collegiate institution. That all attempts at medical legislation for the profession, as a whole, have failed, and will for ever fail, is the decided opinion of your Committee, until justice be rendered to the general practitioners, by conferring on them independent powers to regulate the education and qualification of candidates for membership in their own class. Then, and not until then, a general plan of reform may be arranged which would, or at least ought to give satisfaction to all sections of the profession, and which would be worthy of the sanction of Parliament, while a partial measure would be worse than useless. Any act which would virtually leave the government and qualifications of the general practitioners in the power of the Colleges

of Physicians and Surgeons, or at the discretion or caprice of a Secretary of State, would be highly injurious both to the public and the profession.

It was then moved and seconded, and unanimously resolved,

That the Report now read be received, adopted, and entered on the minutes.

That it appears to this meeting that Tunbridge Wells will be a convenient place for the general meeting in June, 1848; and therefore that the members of this Branch of the Association be invited to assemble at Tunbridge Wells on that occasion.

That Mr. Hargraves, of Tunbridge Wells, be requested to accept the office of President at the Tunbridge Wells meeting, and for the ensuing year.

That Mr. West, of Tunbridge, and Dr. Mackness, of Hastings, be requested to accept the office of Vice-president.

That Mr. Martin, of Reigate, be requested to continue in the offices of Secretary and Treasurer for another year.

That Messrs. Thompson, of Westerham; Pickance, of Penshurst; Gorham, and Hitchings, of Tunbridge; Wallis, of Hartfield; Kelson, of Sevenoaks; Gream, Duncan, and Trustram, of Tunbridge Wells; and Starling, of Hadlow; do form the next committee of management.

That the best thanks of this meeting are due to the officers and other members of the committee of management for the services which they have rendered to this Branch Association at and since the last meeting to the present time, and that they be requested to accept the grateful acknowledgments of the members present.

The Secretary then submitted to the meeting the claims of the Benevolent Fund of the Association, as adverted to in the foregoing report, urging small contributions towards it. He also adverted to Mr. Daniell's "General Medical Annuity Fund," which, although it was not in immediate connection with the Association, was first propounded at the Sheffield meeting, and expressed a hope that Mr. Daniell's appeal will be responded to as it deserves, by the general approbation and adoption of this plan of insurance by members of the Association, many of the most influential members of which have already given Mr. Daniell's institution their cordial support, and aided its advancement by liberal donations, as well as annual subscriptions.

[The papers read at the meeting will be given in a subsequent number of the Journal.]

BATH PATHOLOGICAL SOCIETY.

Fifth Meeting, February 1st, 1847. Mr. NORMAN in the Chair.

CASE XXI.—*Typhus fever; acute nephritis; accumulation of urea in the blood; comatose symptoms: Recovery.*

Dr. Budd brought under the notice of the Society some specimens illustrative of the pathology of albuminuria,—first, in the acute form. The subject of his remarks was a young man who had laboured under typhus fever, marked by the miliary eruptions. In the course of the disease symptoms of acute nephritis were set up, and soon afterwards formidable nervous symptoms made their appearance, threatening death by way of coma. At this time some blood was drawn, and on submitting the serum to evaporation, a powerful urinous odour was exhaled, and on the addition of nitric acid a copious crop of crystals of nitrate of urea was formed. The urine at this time was highly albuminous, and contained numerous fibrinous casts of the uriniferous tubes. Some of these were shown by means of the microscope. The patient ultimately recovered; the albumen gradually diminished; pus-globules took the place of the fibrinous casts; and shortly thereafter the urine returned to its normal condition, and the patient to his wonted health.

Dr. Budd remarked on this case as exemplifying an important form of complication, occurring in the course of continued fever,—viz., the non-elimination of the urea by the kidneys, and its accumulation in the blood, and stated his belief that the retained urea circulating in the blood is the probable cause of continued fever so frequently assuming the typhoid type, with the dangerous and often fatal nervous symptoms which accompany that form of fever.

Dr. Budd then exhibited two kidneys in the advanced stage of granular degeneration, and stated that he had recently met with five cases of that disease, and in all of them the secreting cells of the kidney were found loaded with fat. In three of the five cases there was tubercular disease of the lungs; in the other two there was obstruction of the left side of the heart. In three of the cases there was no deposit of fat in any other organ; in two there was, both in the liver and in the lining membrane of the arteries. Microscopic specimens were exhibited.

CASE XXII.—*Severe gastric affection, with frequent vomiting; tumour in the umbilical or left hypochondriac region.—Dissection: Cancerous tumour attached to the lesser curvature of the stomach.*

Mr. Bartrum exhibited the stomach, with a cancerous tumour attached, and also the liver, of a woman, aged 76, and gave the following account of the case:—The patient when eighteen years of age, while in the West Indies, had an intense attack of jaundice, for which she came to England, since which time she has never had a similar attack, though often told that she laboured under an affection of the liver. She has had two attacks of partial paralysis. For at least five months previous to her death she had complained of peculiar pains about the unbilicus, with a sensation of weight and flatulence of the stomach after her meals, especially after dinner, when there was a sense of distension with suppressed eructation. A month before her death the severity of these symptoms much increased, and at uncertain periods a portion of partially-digested food was rejected, intensely acid, but presenting no other peculiarity. For several days there might be no vomiting, when it would again recur with uncontrolable severity. These symptoms continued, with little variation until death. The bowels, though always requiring aperients, were easily acted upon throughout the illness, *if she were sitting up.* On examining the abdomen, there was felt in the umbilical or left

hypochondriac region a firm moveable globular tumour, to the touch resembling the spleen. Pressure on this tumour gave considerable uneasiness, followed by eructations, nausea and vomiting. The right hypochondrium was perfectly dull on percussion, not enlarged; the liver appeared to descend low and towards the right ilium.

Post-mortem, twenty-four hours after death. On laying open the abdominal cavity, the stomach was found to occupy the centre, much enlarged, with a large pyriform tumour, five inches long by three broad, attached to the anterior surface of the lesser curvature by a short pedicle. The peritoneum covering it and the stomach appeared healthy. The tumour lay on the middle of the transverse arch of the colon, effectually preventing a passage through it with the body lying in the recumbent position,—hence the necessity observed during life of the patient assuming the erect position before the bowels would act. Above the point thus pressed on, the intestines was distended with flatus and fæces; below they were empty and contracted, especially at the point of pressure. On cutting into the tumour it was found to consist of dense areolar tissue, having several small cavities of varying size in its substance, and between its fibrous capsule and the peritoneum, containing a glairy grumous-looking fluid. The pylorus was considerably thickened, there being a similar "colloid" deposit infiltrated in its tissues. The mucous membrane of the stomach was healthy; the morbid product forming the tumour was deposited between the muscular and fibrous tissue of the organ, the muscular structure at that point having become much hypertrophied. From the lower surface of the liver there extended a band of cellular tissue, attaching it to the iliac region, and involving the central fissure, gall-bladder and vessels, duodenum and pylorus. The gall-bladder appeared to be wanting, but on carefully dissecting out this cellular adhesion there was found a cavity containing two gall-stones of the size of large nutmegs, and a third had passed off. Communicating with this cavity was one in the substance of the liver, much larger, that appeared to have existed many years, its parietes being lined by a firm membrane, and marked externally by an extensive irregular cicatrix. The tissue of the liver was otherwise quite healthy, as were all the other abdominal and thoracic viscera. There were no analogous tumours; the mesenteric glands were unaffected; uterus and ovaries not examined.

Mr. Bartrum observed, that the condition of the liver and neighbouring viscera suggested an idea that at some remote period, (probably when she had the attack of jaundice,) there had been an extensive abscess of the liver, which had been circumscribed by peritoneal adhesions; that the abscess had then burst into the duodenum, its cavity had never quite contracted; and the bile had been retained in its unnatural recepticle, giving rise to the large gall-stones above-mentioned.

CASE XXIII.—*Partial necrosis of the femur, removed by amputation.*

Mr. Gore exhibited, for Mr. Brown, in whose practice the case occurred, a portion of the thigh-bone of a lad, aged 16, in whom amputation had been performed on account of partial death of the bone. The disease had been in progress about six months, and had involved the inferior articulating surface of the femur. Mr. Gore remarked on the case as presenting some points of interest in connection with the formation of new bone. He alluded to the various views which have been advanced in order to explain the process by which new bone is formed, and considered that they all, more or less, erred in their too great exclusiveness. The specimen exhibited went to prove that the periosteum alone is not sufficient for the formation of new bone, for in one point only was the entire thickness of the shaft of the old bone dead, and opposite that point was the only part of the new shell destitute of ossific deposit,—showing that whenever there was a portion of old bone left attached to the periosteum, then ossification went on, but when the bone was entirely removed, no such result took place. It may be mentioned that the lad from whom this specimen was taken had, previously to the operation, been much reduced by a long continued drain on his system, so that some doubt was entertained as to his power of undergoing the operation; before his undergoing it, Mr. Brown had him placed under the influence of æther, by which means he was rendered quite unconscious of pain, and subsequently made a rapid and perfect recovery.

CASE XXIV.—*Extensive scalp wound, followed by secondary inflammation, and ulceration of the dura mater: death by way of coma.*

Mr. Gore exhibited the brain, with the skull-cap and membranes, of a man who had died from ulceration of the dura mater, following an extensive scalp wound. The man was driving a waggon, when his dress, which was a waggoner's frock, became entangled in one of the wheels, by which means he was so firmly fixed as to revolve with each revolution of the wheel, his head coming in contact with the ground each time. In this way a large scalp wound has formed, and a considerable portion of the right parietal bone denuded of its pericranium. At the end of about three weeks after the accident, the man showed unequivocal symptoms of pressure on the brain, and died comatose shortly after. Dissection revealed an ulcerated condition of the dura mater, with matter formed between that membrane and the bone.

Mr. Gore stated that he considered the treatment of such cases as the above to require careful revision; for as the cranial bones are dependent for their nourishment chiefly on the vessels of the pericranium, and their anastomosis with those of the diploe, it follows that when a large portion of the cranial surface has been deprived of its pericranium, death of the bone must follow, (certainly of the outer table, and probably of the inner also,) when an effort will be made by nature to get rid of the dead bone by the process of exfoliation. A necessary part of this process consists in the formation of matter between the bone and dura mater, and thus the life of the patient is terminated; whereas, if, on the occurrence of such an accident, a piece of bone be removed by the trephine,

the effects of pressure on the brain would be avoided, and healthy exfoliation might go on.

CASE XXV.—*Paralysis of the left side, with dilatation of the right pupil; apoplectic fit: death.—Dissection: Coagulum on the right lobe of the cerebellum; softening and purulent infiltration of the right crus of the cerebrum.*

Dr. Cardew exhibited the brain of a man who was under his care about two months before his death, with paralysis of the left side, and dilatation of the right pupil. The man complained of very peculiar and painful sensations in the affected side. Some time prior to the coming on of the paralysis, he had a fall on his head from a very considerable height, but did not feel any ill effects from the fall at the time. Two days before his death he was seized with an apoplectic fit, and died without recovering his consciousness. Dissection revealed an extensive coagulum, lying on the right lobe of the cerebellum, and the right crus of the cerebrum was extensively softened and infiltrated with purulent matter. Dr. Cardew considered the softening and purulent infiltration of the right crus of the cerebrum to have been an effect of inflammatory action, set up by the fall which occurred some months previous to death, giving rise to the paralysis above-mentioned; whilst the coagulum found on the right lobe of the cerebellum was the immediate cause of death, and had been effused at the time of the apoplectic seizure two days before that event took place.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE, PARIS.

TYPHOID FEVER.

The subject of æther-inhalation, which has for so long a period monopolized the attention of members, has at length been partially laid aside, and some time is now accorded to points which had been previously neglected. A report has been read by M. Gaultier de Claubry, on a memoir by M. Ragain, in which the author has traced the history of an epidemic of typhoid fever, which occurred in the district of St. Mark de Rino, giving therein a prominent place to the doctrine of contagion. The reporter, who last year maintained the same doctrine through a hotly-contested debate, took this opportunity of reiterating his opinions, both respecting the contagious nature of typhoid fever and its identity with typhus. This did not fail to bring forward his ancient antagonist, M. Rochoux, who went through the same line of argument as on a previous occasion, (*Archives Generales*, xiii.,) insisting on the difference of symptoms in the two maladies, the absence of intestinal lesion in typhus, and its universality in typhoid fever, &c. As regards the transmissability of typhoid fever, M. Bouillaud came to the assistance of M. Rochoux, affirming that he had never witnessed a single instance of contagion, forgetting apparently that one person who has seen a thing is worth fifty who have not. Louis, on the other hand, does not doubt the contagious nature of typhoid fever, but at the same time combats the opinion as to its identity with true typhus.

COPPER AND LEAD IN THE HUMAN BODY.

M. Martin Solon next read a report on a memoir by M. Millon, entitled "Remarks on Lead Colic, and Colic from Copper," in which the differential diagnosis is minutely laid down. The reading of this report was followed by an interesting discussion, which turned mainly upon the normal existence of lead and copper in the human body, and the mode of distinguishing the normal metal from that which has been accidentally introduced. It appears that in 1830, a chemist of Rennes, M. Sarzeau, first made known the presence of copper in the food, and afterwards in the organism, and warned chemists engaged in medico-legal cases, that in operating upon large quantities of matter an appreciable quantity of copper would be found. Orfila maintained that in lead colic it was this normal lead that was discovered in the liver and other organs, but did not deny that in poisoning by the salts of lead, the metal might be introduced in such quantity as to be detected by incineration and other treatment of the tissues.

M. Gerdy read a memoir upon the "Retraction of the White Tissues," in which he endeavoured to prove that contractions of the limbs were produced by the retraction of these tissues, (the tendons, ligaments, &c.), and not of the muscles themselves. This opinion was contested by M. Blandin and others.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES, PARIS.

During the past month but few memoirs of importance have been presented to the Academy.

Dr. Marshall Hall addressed a letter to the Academy on the subject of his discoveries in the nervous system. Valuable as these are, they have been so frequently brought before the British medical public, that they do not require further mention in this place; suffice it to say, the letter to the French Academy does not contain any new matter.

M. Boussingault communicated his researches on the influence of salt upon the nutrition of agricultural live stock. This influence appears to be small.

M. Marc Dupuy recorded his experience of the injection of æther into the rectum, from which it appears that insensibility is produced with as much certainty as by respiration. He further states that the discolouration of the blood which is observed when the vapour is inspired, does not occur when the æther is injected into the rectum.

M. Doyere also presented a memoir upon ætherization; and M. Teste one on the therapeutic virtues of the Thermal Waters of Bagnoles, &c.

TOTAL ABSTINENCE AND MEDICAL TESTIMONY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOUNAL.

SIR,

Although I knew that your Northampton correspondent was decidedly anti-teetotal, both as a man and as a practitioner, I must confess that I was unprepared

for such a communication from his pen as that which now lies before me in the Journal of the 2nd instant. (June.) Believing, as I do, that the propositions alluded to in this letter are sound and invulnerable, it appears to me that your correspondent would have done better if he had given us something more than mere assertion, unsustained by argument or fact, as to the essential unsoundness of the propositions he so unsparingly and unhesitatingly condemns.

By implication, it appears to me, that your correspondent has impeached the attainments, the wisdom, the prudence, or the sense of men, doubtless, many of them, at least, as scientific, sensible, disinterested, self-denying, and benevolent as himself; and all who know him know, that in these traits of character, or most of them, *he* is not deficient. I am not one of the 1000 gentlemen referred to, nor am I about to step forward as the defender of their faith. I cannot doubt their ability to defend the course which (as men of science and benevolence,) they have taken, with the desire of benefitting their fellow men, and of dissipating a delusion that has done more to make men unhappy, brutal, immoral and infidel, than all other causes put together. I rejoice that so great a number of medical men (and surely without any unworthy motive,) have shewn that *they* do not regard teetotalism as "an egregious piece of folly, or an ephemeral bubble, blown up into a popular movement by the restless spirit of this busy and self-relying age." I am the more pleased, because I cannot believe that such men who have a high "reputation" to sustain as men "of science and sense," would lend their names to "bolster up this or any other novelty," in the very teeth of popular prejudice, antiquated customs, and money and powerful interests, their *own* not excepted, without serious thought, and a solemn conviction of the soundness of their own opinions. If, as another of your correspondents ssserts, these gentlemen have been imposed upon, I hope they will not only withdraw their names, but expose the men who have "resorted to unworthy means to procure their signatures;" and if this is not done, I hope your correspondent θ will not fail to do it for them, as a duty he owes to the public, who have a right to be protected from such deception.

With the remarks of Dr. Robertson, on the *tendency* of teetotalism, &c., I am confounded; they are so utterly unfounded,—so contrary to fact, that I do regret he should have made them. What is teetotalism? Abstinence from intoxicating drinks as beverages; nothing more. What is its intention as "a scheme of human reformation?" To prevent intemperance. On what is it based? On the *spirit* of Christianity. What is that? Love—love to man, in obedience to God. Christianity as a *theory*, will not control the passions, or amend the conduct of the mass of mankind. Christianity in *practice* will lead all who really feel its power, and are transformed by its influence, to desire to do good; to use any means that are in accordance with the "royal law of love" to improve our race, physically, mentally, morally, and sociably; and it is well known whatsoever tends to the one, leads, in many cases, to the other, and the higher.

Your correspondent intimates (and by many who will not "ponder well," his intimations will be taken for truth,) that teetotalism is not based on the "higher feelings of our nature," and that it "usurps the place of law and Gospel. Can he prove this? I affirm he cannot. Does he know who put teetotalism in such a position? I think not; then why does he say it? We have had misunderstanding and misrepresentation long enough; let it be discarded henceforth. Teetotalism is nothing added *to*, but grows out *of*, the religion of Jesus, and it does not disparage religion. It does not set it aside; it is used by the *Christian* as an agent subsidiary to religion. It is employed to withdraw the many, and to preserve more from the fascinating influence of the bottle or the glass, whether in the public-house or in the parlour, and to persuade them to visit the house of God, and attend to the high, holy, and personal duties of religion. Instead of inducing a Godless turn of mind, it is a well-known fact, that great numbers have been led to the sanctuary thereby, and *there* been led to see, and with penitence, to forsake their sins, and now rejoice in the salvation of God. Many ministers of the Gospel, in the establishment and out of it, rejoice in the fact, and glorify God, for those now in their right mind. May these results of teetotalism be multiplied a thousand fold.

I am, Sir,

Yours faithfully,

T. LORD.

Brigstock, June 14.

INHALATION OF ÆTHER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

In the last number of the *Provincial Medical and Surgical Journal*, you have re-published some observations on the injurious effects of the inhalation of the vapour of æther, by Dr. James H. Pickford, of Brighton. Amongst them the following startling paragraph occurs:—

"Ætherization, it is to be feared, exerts also a baneful influence directly upon the respiratory organs. A medical friend in Dublin informed me recently, that of thirty fatal cases following operations in which æther had been employed in the various hospitals of that city, eight were found to be the subjects of recent tubercles of the lungs, the undoubted product, it was believed, of inhalation."

If there are any of my brother members of the Provincial Medical and Surgical Association who can believe that, if a fourth of the above number of fatal cases, from the inhalation of the vapour of æther, had occurred within the last six months in Dublin, the practice would not have been completely abandoned here, I beg leave to assure them that the statement in the paragraph quoted is altogether groundless, and that Dr. Pickford has been grossly misinformed by his medical friend in Dublin. Since I read Dr. Pickford's observations, I have inquired respecting this matter of one of the surgeons of every hospital in Dublin. The

result of my inquiries is this,—one case only has occurred in the Dublin hospitals in which a suspicion could be entertained that death, after operation, was connected with inhalation of the vapour of æther. In the case in question, death took place fourteen days after the operation; and the gentleman who performed it, though he will not assert that the inhalation had no influence on the fatal event, attributes it to acute phthisis. So far as the case will go to sustain such a theory as Dr. Pickford has advanced, he is therefore entitled to produce this fact in its favour.

I am far from thinking there is no risk in the practice of the inhalation of the vapour of æther; but I believe the chief danger arises from continuing the inhalation too long. In the number of your Journal from which I have already quoted, I observe a case by Mr. W. M. Trousdale, in which the inhalation was continued for seven minutes. Perhaps, in this case, inhalation for a shorter time would not have secured perfect insensibility; but in my own experience of the practice, which is now considerable, I find that, with a good apparatus, and taking care that no air enters, either through the nostrils or by the side of the mouth-piece, three minutes of inhalation are abundantly sufficient in the great majority of cases, where operations are to be performed, that can be done in two minutes or a little more,—such as all the ordinary amputations, &c. To continue the inhalation half a minute longer than is necessary to procure insensibility is, I think, to be condemned, as incurring unnecessary risk.

I am, Sir,

Very faithfully yours,

J. MACDONNELL.

4, Gardiner's Row, Dublin,
June 26, 1847.

General Retrospect.

PRACTICAL MEDICINE.

TINCTURE OF ACONITE IN RHEUMATISM.

From the time of Stoerk, the Aconitum Napellus has been frequently used in rheumatism; but the physicians who have used the plant are not agreed as to the best preparation of it. Some, for instance, advise the powder to be given in all cases; others prefer the extract. Lately the aconitine or active principle has been exhibited, and more recently still the tincture has been strongly recommended as the most certain form in which the medicine can be given. M. Magaud, after a patient trial of the above preparations, gives the preference to the tincture, and exhibits its value in several cases. The subject of the first was a young lady, who was affected with occasional pains in the left arm, which were induced merely by atmospheric vicissitudes, and continued for four or five days in succession. In the month of February these pains declared themselves as usual, but were completely dissipated by the administration of six drops of the tincture.

The second case was an old mail-guard, subject to darting pains in the face and limbs. On the last attack, as he was a robust man, blood was taken from the arm, and six drops of the tincture of aconite were given night and morning; the pains diminished, and disappeared in three days.

The third instance was that of a person affected with chronic rheumatism, occupying the lower limbs, the wrists and the loins. Tincture of aconite was given in doses of six drops, gradually increased to thirty drops, three times a day, with perfect success.—*Journ. de Méd. de Lyons.*

[The increase of dose to the extent mentioned in the last case, is a practice which cannot but be regarded as extremely hazardous, if, as we doubt not they are, the experiments of Dr. Fleming on the medicinal and physiological action of this potent medicine are to be confided in. It will be seen on reference to his work, that five minims every four hours is an average dose to commence with, and that the increase should take place by single minims. The effect also of this medicine, as was lamentably shewn in Dr. Male's case, is cumulative, so that a patient should always be visited every six or eight hours at least, while taking anything like an active dose.]

PREVENTIVE TREATMENT OF NOCTURNAL EMISSIONS BY LIGATURE OF THE PENIS.

M. Lallemand has given no directions for the treatment of seminal emissions at their commencement. M. Teissier relates the case of a young man, who having been for a length of time treated unsuccessfully for nocturnal emissions, conceived the idea of tying a ribband round the penis at night. The constriction produced by this ligature during erection, was sufficient to awake the patient, who, by getting up and emptying the bladder, was able to pass the night comfortably. Two or three other cases are also mentioned equally successful.

[This proceeding is of course available only at the commencement of the complaint, when the emissions are accompanied by erections and dreaming; at a later period, when emissions take place, without any turgidity of the penis, it is clearly inapplicable.]

SURGERY.

TREATMENT OF DISSECTION-WOUNDS.

The melancholy death of Mr. Potter, of University College, from a puncture received in dissection, has induced Dr. Hargraves to make known his plan of treatment of similar wounds. He says—

For some years I have been in the habit of treating myself in the following manner, when suffering from such injuries, either by my own inadvertence or the awkwardness of others. I have always recommended it to my pupils whenever I have seen them so injured.

The treatment applies to the fingers and the thumb, the parts most frequently liable to be wounded:—Wash them well for a few minutes in cold water; then suck them; immediately after apply a ligature a little above the cardiac side of the wound with such tightness as will induce decided congestion, which will be indicated by the colour of the parts; some blood will also flow from the injured surface, and a certain degree of numbness will follow its application. The ligature

is then to be firmly tied and knotted, and allowed to remain on for at least twelve hours; I have kept it on for double that period, and still pursued my professional engagements.

The physiology of such treatment is explained by the ligature causing a permanent stasis in the fluids of the part injured on its distal side, and producing a well-marked phlethora there; the greater the amount of it the greater will be the impediment to absorption. The constriction caused by the ligature will also oppose a barrier to the return of the venous and lymphatic fluids into the system, consequently to their being circulated through it, so that the poison is prevented entering into the constitution and destroying it, and will then be eliminated locally from the part where it was first applied; thus suffering and pain will be obviated, and life, valuable to all, will be preserved.

I have no hesitation in directing the attention of the profession to this simple, and, in my experience, efficacious practice. I would also suggest to those engaged in *post-mortem* investigations, whether anatomical or pathological, a plan worthy of their adoption preparatory to commencing them,—which is to smear or rub into the hands any bland oil; this supplies an additional coating to the epidermal one, and will act as a means of closing any *very minute* and superficial abrasion which might exist, though the individual is not aware of it. Will it also limit the absorbing powers of the skin?—*Dublin Medical Press.*

MODE OF CURING OBSTINATE OLD ULCERS.

Dr. Bresciani de Borsa states that, for very old ulcers, especially those of the leg, which resist every other method of treatment, he has obtained sound cicatrization, by instituting, by means of caustic potass, a new ulcer in the vicinity. In a piece of adhesive plaster a hole is made, somewhat smaller in size than the artificial ulcer is to be; it is then applied at one or two finger's breadth from the old sore; caustic potass is rubbed on this space until an eschar is formed; and during the consequent inflammatory and suppurative processes, the old solution of continuity, which had so obstinately resisted treatment, closes up, and the cicatrix, in general, continues sound.

If the healed ulcers had resulted from a disordered constitution, to the appropriate internal treatment he adds, either an issue in some usual spot, or places a small portion of pus in the artificial ulcer itself, when nearly healed, so as to convert it into a common issue, which contributes much to efficient treatment. By this prudential precaution he has never seen any mischief produced in the constitution of those who had long been subject to obstinate ulcers. If the ulcer was produced by a traumatic cause, after it has become healed, the artificial one may also be cicatrized as soon as possible, without any injury resulting. More than a hundred cases have been cured in this manner; and many instances of cure have occurred in the hospital, of ulcers of twenty or thirty years' standing.—*Mr. Ancell's Report on Surgery.*—"*Half-Yearly Abstract,*" *Vol. V.*

CREOSOTE IN OBSTINATE ULCERS.

The same physician remarks that this application for indolent and obstinate ulcers seems to be going out of use, but he does not know why, for in his own practice he finds it so useful that he calls it a sovereign remedy. The formula is, Creosote gtt. vj., Aq. Font oz. iv., M.; increasing the strength gradually to ten or twenty drops. A change in the pathological condition of old, foul, indolent ulcers, is brought about with great celerity. It is certainly the best flesh-producer known in surgery in these morbid affections. Has the remedy some specific action on the capillaries? for in even twenty hours a foul surface may be seen covered by luxuriant granulations, and old, indolent ulcers become benign and active. The application must always be reserved for old and indolent ulcers, for if used in active, inflammatory, and painful ones, great mischief will result; and Dr. de Borsa believes it has fallen into disrepute because it has so frequently been prescribed in conditions which contraindicated its employment.—*Ibid.*

TREATMENT OF GANGLION.

Mr. Skey recommends puncture with the point of a small lancet as a less painful and more certain remedy than a blow in the treatment of these affections. The puncture may be sufficiently large only to allow the contents to be pressed through. A pad of lint, bound down with adhesive plaster firmly applied, will almost invariably destroy the cavity in twenty-four hours.

A case occurred in the early part of the summer, which may serve to remind us that even these cutaneous cysts will not bear rough treatment. The cyst, which was rather unusually large, occupied the back of the wrist in a youth of eighteen. Mr. Skey punctured it several times, but it returned. He then passed through it a very fine thread, but being unfortunately, absent from the hospital on the day of his next visit, the thread remained for a few days beyond the usual period. Inflammation followed, of a severe kind, and the youth became an inmate of the hospital for some weeks, where, having recovered from the attack of inflammation, he returned to the out-patient room with his original malady.—*Medical Gazette.*

POLYPI OF THE RECTUM IN THE INFANT.

By M. Guersent, jun.

When a child suffering from this affection is brought to the surgeon it is frequently at first sight supposed to be labouring under prolapsus ani. The symptoms are obscure and easily confounded with those of other diseases. They are chiefly bloody stools, with frequent tenesmus. When the polypus has acquired larger dimensions, defæcation becomes more and more difficult, and the tumour is generally expelled by the effort. This is seen to be of variable size in different cases, of reddish colour, and smooth. It has been frequently remarked by the author that the fæcal mass is marked by the projection of the tumour, which indents it into the form of a gutter. This is no more than might be expected.

Authors are not agreed as to the nature of these tumours; some regard them as fibro-cellular, others consider them as constantly of a mucous texture. This

is the opinion entertained by M. Stoltz, to whom we are indebted for some very able researches upon the affection. According to this writer, polypi are generally caused by prolapsus of the rectum, which, by its frequent occurrence, causes a portion of the mucous membrane to be pinched up by the sphincter, and thus to become the starting-point to the tumour. M. Gendrin admits that this explanation may be correct in some instances, but he thinks that it is not applicable in the majority.

It sometimes happens that the tumour is implanted so high up that it does not pass out of the rectum. The nature of the case is then rendered more doubtful. After a time it is apt to become fungous and to bleed readily, in which case it is liable to be mistaken for a hæmorrhoidal tumour. The diagnosis can only be formed by a tactile examination. The many other affections to which the part is subject, as fissure, condylomata, etc., are so comparatively rare in infancy, that they are scarcely likely to give rise to mistake.

The usual effect of these tumours is to give rise to repeated bleedings, by which the general health of the infant is rapidly deteriorated; it therefore becomes necessary to effect a speedy cure. They may sometimes disappear spontaneously, or drop off by the gradual elongation and consequent narrowing of the pedicle. The author has observed this termination in several instances, but does not consider it safe to wait for such an event.

The removal of the tumour may be effected in several ways—by cauterization, tension, excision, or ligature. The author recommends the latter as the most free from danger, unless the pedicle is extremely delicate, when it may be cut through at once. The ligature is applied by the guidance of the index-finger, when the tumour is not implanted high up. When it is more deeply seated, the author dilates the anus with a bivalve speculum. The tumour is then seized with an appropriate forceps, and the ligature applied as in uterine polypus.—*Gazette des Hôpitaux*, Nov. 12, 1846.

WOUND OF THE SCROTUM WITH HERNIA OF THE TESTICLE.

M. Ollivier (d'Angers,) was consulted in the case of a young man who, while gathering apples fell from the tree upon a stake fixed below, which penetrated the scrotum, and tore it into two unequal parts. On his arrival M. Ollivier found both testicles completely exposed, and the injured scrotum gangrenous in several points. The injury occupied the entire length of the scrotum from the perineum to the root of the penis. In expectation of severe inflammatory symptoms, the patient was bled from the arm, strictly dieted, and purged. After having carefully sponged the wounded parts, the first endeavour was of course directed towards replacing the testicles, which was effected without pain, the organs being kept in site by ligatures. On the day following a large portion of the scrotum sloughed away, and the left testicle was again uncovered; and moreover, from the great engorgement of the parts, it was found impossible to form a scrotal investment for it; in other respects the patient was in a satisfactory state. Under these circumstances the part was dressed with simple dressing, and in the course of two months the lost portion of the scrotum was entirely restored, the testicle becoming adherent.—*Revue Medico-Chirurgicale*, Fevr., 1847.

MIDWIFERY.

PREVENTION OF ABORTION.

In a late number of the "Dublin Quarterly Journal," Dr. Griffin advances, in one of his "Medical Problems," the question whether, when miscarriage or premature labour takes place, at fixed periods from the influence of an acquired habit, the periodical movements may not be prevented by such remedies as prevent the return of epileptic fits or agues? In answer to this query, he relates the case of a lady who had miscarried several times at the third month, and came under his care in her sixth pregnancy. Dr. Griffin could not detect any obvious cause of her former abortions, and as all other means had been tried, it occurred to him to try a course of some metallic tonic, given on the same principle as in epilepsy. She therefore took two grains and a half of oxide of zinc, with extract of hops, three times a day, followed by valerian, aromatic spirits of ammonia, and decoction of snake root. She was advised, instead of lying upon the sofa, to take the air as much as possible. Under this treatment she passed the usual period of miscarriage to her great joy. Happening, however, to meet soon after with causes of mental excitement, she experienced the premonitory symptoms of abortion to which she had been accustomed, but by taking a grain of opium every hour till the pain ceased, the accident was warded off, and she was soon able to resume the zinc. She went her full time. A second and still more striking case is also narrated.—*Dubl. Quart. Journ.*, May, 1847.

ON INCISION OF THE NECK OF THE WOMB IN LABOUR.

M. Nichet regards the above operation as warranted under the following circumstances:—

1. In puerperal convulsions, in which the extraction of the fœtus, is judged to be necessary.

2. When serious hæmorrhage declares itself at the close of pregnancy, and the neck of the womb remains undilateable.

3. In narrowing of the pelvis, when it has been ascertained by measurement that the application of the forceps will be necessary, and the cervix does not readily dilate.

4. Finally, when the head is separated from the trunk and remains within the womb, and the rigidity of the cervix will not allow of the introduction of the hand.—*Journaal de Méd. de Lyons*.

[Incision of the cervix has been repeatedly advised by British obstetricians in certain cases of rigidity of that part, and more particularly of late by Drs. Lever, Oldham, and Professor Simpson; but we much doubt whether either of these physicians would consider the conditions pointed out by Nichet as indications which warrant the operation. In the second case more particularly, in which the bleeding commonly arises from implantation of the placenta upon the cervix, the danger of incising the part may be readily conceived.]

TURNING A SUBSTITUTE FOR CRANIOTOMY.

Dr. Simpson states that he has practised turning as an alternative for craniotomy and the long forceps, in several cases in which the head had been morbidly detained at the brim of the pelvis, from the slighter forms of disproportion between the two; and he believes it to present various advantages over embryulcio. It gives the child a chance of life; it is more safe to the mother, because it can be performed earlier in the labour, and more speedily; it enables us to adjust and extract the head of the child through the imperfect pelvic brim in the most advantageous form and direction, the head flattening *laterally* under the traction; the neck of the child (if it were living, or only lately dead,) is so strong as to allow us to exert such a degree of traction upon the obstructed head, that the sides of the cranium might become very greatly compressed, or even indented under it, and that without necessarily destroying the child; and, lastly, he observes, it is a practice which can be followed when proper instruments are not at hand, and the avoidance of instruments is generally desirable when it is possible.—*Monthly Journal of Medical Science*, Jan., 1847.

MATERIA MEDICA.

SYRUP OF HYDROCYANIC ACID.

At the request of several medical practitioners a very elegant syrup of prussic acid has been devised by Dr. Reich, affording an eligible means of administering that potent substance in a certain dose. He prepares it by adding to a syrup of sweet almonds a definite quantity of amygdaline. His recipe, is as follows:—Take of sweet almonds two ounces; immerse them for the space of a night in cold distilled water, and in the morning remove the skin by the pressure of the finger and thumb; then pound the almonds in a deep mortar, adding two ounces of the purest sugar. Pound together in a mortar, either of porcelain or marble; then by degrees add distilled water two ounces, and strain, with the application of slight force. To this emulsion add sugar of the purest kind two ounces, and promote the solution of the sugar by mixture alone, heat being avoided. To four ounces of this syrup add seventeen grains of amygdaline, and rub together in a porcelain mortar. Much of the syrup need not be kept ready prepared, as its extemporaneous formation is so easy. An ounce contains a quarter of a grain of real prussic acid.—*Buchner's Repertorium.*

THE MEDICAL REGISTRATION BILL: REPLY TO MR. ALLISON.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Had I foreseen that the temperate remarks which I lately made respecting the conduct of the *Council of the National Institute of Medicine*, as regards *Mr. Wakley's Medical Registration Bill*, would have elicited from any respectable member of the profession such uncalled-for insinuations as are contained in Mr. Allison's letter in your last Journal, I should never have been at the trouble of writing them. I feel sorry to say, this is only another of the numerous specimens of ill feeling which are sadly too prevalent among us, and which, I fear, will prevent any Act of the Legislature doing us much good.

"Senescit in corde cacoethis."

It appears, on referring to the list, that Mr. Allison is a *member* of the Council of the Institute which he supports. I do not therefore blame him for sticking to "*leather*," but I cannot think any unprejudiced person can call *my* letter "*abusive*." I certainly reproached the conduct of the members of the Council, for they are like the dog in the manger. His "*leather*" and letter forcibly contradict the old proverb

"Raro in tenui facundia panno."

Those who have read much of medical biography know, that a large proportion of the late and present race of eminent physicians, were, originally, general practitioners; for instance, Jenner, Harvey, Smellie, Cullen, Brown, William Hunter, Mason Good, Johnson, Abercrombie, Wardrop, Pareira, A. T. Thompson, Babington, Clutterbuck, &c., &c. For the attainments of such physicians I have the highest regard, knowing that they have well earned the little honour which their title gives them. But I have no common fellowship with those physicians who wish to keep in ignorance the great body of general practitioners.

I regret I have not the honour of the personal acquaintance of Mr. Allison, because he would have known that my chief aim in medical reform is,—*first*, to ascertain that every person, before entering the profession, shall have received a very liberal education; *secondly*, after having studied regularly a sufficient length of time, to compel the candidate to pass through a most searching and *practical* examination as to his fitness to practise; *thirdly*, that he shall afterwards be sufficiently protected, not only from the interference of ignorant quacks, but from the opprobrium, ignominy, and insult too often unmeritedly directed against some of the most deserving and enlightened of our brethren, by persons under the control of Government; and *fourthly*, that by these means, we may be enabled to take and keep our proper rank in society. From these persons, after ten years practice, and another practical examination, I would select our future consulting physicians and surgeons.

Perhaps the most charitable mode of interpreting Mr. Allison's letter may be, that seeing the declining state of the Institute, he is acting on the old maxim

"Audacia magna superest malae causae."

I have the honour to remain, Sir,
In great haste, your faithful Servant,
E. J. SHEARMAN.

Rotherham, June 17th, 1847.

Medical Intelligence.

QUEEN'S COLLEGE, BIRMINGHAM.

A meeting of the Council of Queen's College was held on Saturday last, the Rev. and Worshipful Chancellor James Thomas Law, Vice-principal, in the chair. The new Charter of Incorporation was submitted to

the members by William Sands Cox, Esq., the Dean of the Faculty, and warmly received.

Her Majesty has been graciously pleased to confer on the College most extensive privileges.

Full powers have been given to "the Principal and Council to embrace in their system of education, Laws, Literature, Science and the Arts."

Also to be able and capable in law to take, purchase, and hold for the use of the Queen's College and the Queen's College Hospital, any goods, chattles, or personal property whatsoever, and also to be able and capable in law, notwithstanding the statutes of mortmain, to take, purchase, and hold to them and their successors, not only all such lands, buildings, hereditaments, and possessions as may be from time to time exclusively used for the sites and immediate purposes of the College and Hospital respectively, but also for the use and maintenance of the College, any other lands, tenements, and hereditaments, and possessions whatsoever, not exceeding the annual value of £2,500, and also for the use and maintenance of the Hospital, any other lands, tenements, and hereditaments, and possessions whatsoever, not exceeding the annual value of £2,500.

Also to have power to accept on behalf of the College or Hospital, gifts and endowments for promoting particular objects of education or otherwise, in aid of the general purposes of the College or Hospital, on such terms and conditions as may be agreed upon for the purpose, between the said College and the person bestowing such gifts and endowments.

With respect to the mode of electing the Professors it provides—"that whenever a vacancy shall occur in any Professorship, the names of the Candidates shall in the first instance be referred by the Council to the Professors, who shall make a special report to the Council of the names of such Candidates, as in their judgment shall be qualified and eligible, professionally and otherwise, to fill the vacant Professorship, and that the Council shall then recommend to the Governors from the Candidates included in such report, one whom they think best qualified to fill the vacant Professorship."

It also provides—"that whenever in the opinion of the Council any Professor ought to be removed by reason of neglect of duty, incapacity from permanent illness, infirmity, or other sufficient cause, a report to that effect shall be laid by the Council before a special meeting of the Governors, to be called for that purpose, two thirds of whom shall have power to remove such Professor, the votes of such meeting to be taken by ballot."

It also enables the Council to confer on its distinguished students an honorary distinction. The Council shall have power from time to time to elect such members of the College holding a diploma in Medicine or Surgery, or being graduates in medicine, law, or arts, or such members of the "late Birmingham Royal School of Medicine and Surgery," as the Council may by their bye-laws determine to be "Fellows of Queen's College, at Birmingham," with power to vote at all special and general meetings of the Governors, and with such powers and privileges as may be determined upon from time to time by the Council.

It also provides "that all fees from students for attendance upon the Medical and Surgical practice of the Queen's Hospital, shall be paid to the Treasurers of the College, for the use and purposes of the Hospital; provided nevertheless, that it shall be lawful for the Council of the College from time to time to pay over such proportion of the fees as they shall think fit to such Medical and Surgical officers as are engaged in the actual duties of Professors of the College, and of Medical and Surgical Officers of the Hospital."

A sub committee consisting of the Rev. Chancellor Law, Dr. Eccles, Dr. Birt Davies, and William Sands Cox, Esq., was appointed to draw up a dutiful and loyal address, praying her Majesty to be pleased to accept the most respectful and grateful acknowlegments of the College, for her Majesty's great kindness in granting to the College such important privileges, to be presented at an adjourned meeting to be held on the 28th instant.

MEDICAL APPOINTMENTS.

Charles W. Bell, Esq., M.D., K.L.S., a nephew of the late Sir Charles Bell, and formerly attached to the British Embassy at the Court of Persia, has been elected one of the physicians to the Manchester Royal Infirmary, in the room of Dr. Satterthwaite, resigned.

Dr. George Dixon Hedley has been elected one of the Physicians to the Bedford General Infirmary, in the room of Dr. Mesham, deceased.

M. Laugier, Surgeon to the Hôpital Beaujon, Paris, has been appointed Surgeon to the Hôpital de la Pitié, in the room of M. Lisfranc, deceased.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, July 2, 1847:—J. O'Brien; J. Day; H. J. Rice; T. Park; F. Mason; C. D. R. Symons; G. A. H. Hepworth; M. Thomas; W. E. Hambly; W. Mott; A. Blyth; W. G. Cort; H. Crisp; E. W. Lowe; J. P. Badley.

Gentlemen admitted Members on Friday, July 9, 1847:—H. P. Harris; L. Truefitt; J. Tudor; J. Rogers; J. Farmer; J. Burgan; H. F. Barnett; J. Fayrer.

At a meeting of the Fellows of the College, held on the 1st instant, the President, William Lawrence, Esq., in the chair, Mr. Edward Cutler, Mr. Charles Aston Key, and Mr. Cæsar Henry Hawkins, were re-elected Members of the Council. Mr. Soden, of Bath, presided at the annual dinner.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, June 17th:—John Richardson, Hindon; Edward Lund, Faversham; Charles Palmer, Liverpool; C. Warren Price, Abergavenny; Jonathan Wybrants, Shepton Mallett; William Davies, Merthyr; Joseph W. Raleigh Baxter, England.

Thursday, June 24th:—Herman H. Tribe, Chatham; John Riggs Miller Lewis; George Augustus Jeffery, London; William Jones, Anglesey; George Hawkesford, Birmingham; William Crosby, York; Thomas Clayson Mourilyan, Deal; John Dickson, Ebrington; John Griffiths Doidge, Cornwall; C. Broughton, Mundham, Loddon; John Taylor Rowland, Mytton.

Thursday, July 1st:—James Henry Thomas Vaughan Hughes, Nannerch, Flintshire; Joseph White, Nottingham; Thomas Rhodes Armitage, Leeds; Francis William Merry, Shottesham, All Saints.

OBITUARY.

Died, May 20th, at Erzeroum, aged 33, George Joseph Bell, Esq., M.B., K.C.L.S., Radcliffe Travelling Fellow of Oxford, and Physician to her Majesty's Mission in Persia. Dr. Bell was a son of the late Professor George Joseph Bell, of Edinburgh.

June 28th, in Welclose Square, of acute laryngitis, aged 38, Edwin John Quekett, Esq., F.L.S., surgeon to the Tower Hamlets Dispensary. Mr. Quekett was a member of the Council of the Linnæan Society, and well known as a contributor to the Transactions of that Society, and as a supporter of the Microscopical Society, of which he was one of the fonnders.

June 28th, at Bath, Charles C. Langworthy, M.D., one of the oldest practitioners of that city.

July 3rd, aged 76, M. Pariset, the Secretary to the Academie de Médecine, Paris.

July 4th, at Camden Town, aged 47, Joseph Curtis, Esq., Surgeon.

July 5th, at Paris, aged 44, M. Casimir Broussais.

BOOKS RECEIVED.

On Pulmonary Consumption; and on Bronchial and Laryngeal Disease, &c. By Sir Charles Scudamore, M.D., F.R.S., of the Royal College of Physicians, &c. &c. London: Churchill. 1847. 8vo. pp. 259.

On the Pathology and Treatment of Dysentery; being the Gulstonian Lectures delivered at the College of Physicians, in February, 1847. By William Baly, M.D., Physician to the Milbank Prison, &c. (From the London Medical Gazette.) 8vo. pp. 33.

Anecdota Sydenhamiana: Medical Notes and Observation of Thomas Sydenham, M.D. Second Edition. Oxford: Parker. 1847. 16mo. pp. 56.

On the Duties of Physicians, resulting from their Profession. By the late Rev. Thomas Gisborne, M.A. Oxford: Parker. 1847. 8vo. 16mo. pp. 56.

The Half-Yearly Abstract of the Medical Sciences. Edited by W. H. Ranking, M.D., Cantab., late Physician to the Suffolk General Hospital. Vol. V. January—June, 1847. London: Churchill. 1847. pp. 413.

METEOROLOGICAL JOURNALS FOR MAY, 1847.

Kept at Sidmouth, by W. H. Cullen, M.D.; at Honiton, by Mr. Rogers; at Romsey, Hants by F. Buckell, Esq., Surgeon; at Uckfield Sussex, by C. L. Prince, Esq.; and at Harrogate, by G. Kennion, M.D.

		Sidmouth.	Honiton.	Romsey.	Uckfield.	Harrogate.
External Thermometer.	Mean at 9 a.m.	52.98	53.87	58.09	.	54.80
	,, at 9 p.m.	51.38	8p.m. 51.67	52.32	.	50.76
	,, of the Maxima	60.01	61.27	64.70	69.35	.
	,, of the Minima	46.34	45.45	45.75	45.57	.
	Absolute Mean	53.25	55.26	55.23	56.96	52.78
	Mean of 10 preceding years	53.98	.	.	.	.
	Extreme highest	24th 68.00	27th 73.00	28th 81.50	28th 87.00	29th 70.00
	,, lowest	4th 38.50	4th 35.00	1st 34.00	1st 29.00	2nd 38.00
	,, range	29.50	38.00	47.50	58.00	22.00
	Mean daily range	13.21	15.80	18.97	24.12	.
	Greatest ditto	21st 21.00	.	27th 37.50	.	.
	Least ditto	8-9th 5.00	.	8th 7.50	.	.
	Maximum in the Sun	.	.	.	28th 98.00	.
	Minimum on the Grass	.	.	.	1st 27.00	.
Barometer.	Mean at 9 a.m.	30.057	30.02	29 294	.	29.69
	,, 9 p.m.	30.077	8p.m. 30.04	9p.m. 29.277	.	29.658
	Extreme highest	31st 30.700	31st 30.80	31st 29.790	31st 30.46	31st 30.34
	,, lowest	8th 29.550	8th 28.82	8th 28.790	8th 29.20	29.15
	,, range	1.150	1.98	1.000	1.26	1.19
Dew Point.	Mean at 9 a.m.	46.70	.	49.142	50.87	.
	,, 9 p.m.	45.40	.	49.563	.	.
	Days fine	15	15	13	.	19
	,, dull and variable	2	.	.	.	.
	,, on which any rain fell	15	16	18	.	12
	Quantity of rain in inches	2.91	.	2.580	1.63	.
	Evaporation	.	.	3.015	3.27	.
	Thunder and lightning	.	.	15th & 18th	.	.
	Prevailing Winds	S. SE.	SW. SE.	SW. SE.	SW.	SW. SE.

TO CORRESPONDENTS.

Communications have been received from Dr. R. H. Powell; Mr. Prince; Dr. Payne; Mr. Nunneley; Mr. J. Staines; Mr. H. L. Smith.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

THE RETROSPECTIVE ADDRESS,

DELIVERED AT THE SIXTH ANNIVERSARY OF THE READING PATHOLOGICAL SOCIETY.

By Edward Wells, M.D., Physician to the Royal Berkshire Hospital.

(*Continued from page* 369.)

V.—Diseases of the Urinary System.

Diabetes.—Although the more recent inquiries, and especially those of M. Bouchardat, into the causes and origin of diabetes, would lead to the inference that the disease depends primarily upon a vitiated action of the stomach, I have preferred in the present instance, to class the following example of that disorder under the diseases of the urinary system, for unfortunately the condition of the stomach after death does not seem to have been noticed, at least no remarks to that effect appear among our minutes.

On the 2nd of December, 1846, Mr. Harrinson presented the kidneys, uterus, and portions of the lungs of Mrs. W., who had died of phthisis, with diabetes mellitus. She was a strumous subject, aged 22, married one year and a half, and had had one miscarriage at six months. He had attended her soon after her miscarriage, for slight inflammation (as he supposed,) of the cervix uteri. Her chief complaint was of pain in coitu, which was only partially relieved by the treatment employed. Three months after her miscarriage, and five before her death, she first had urinary symptoms. She began to pass a large quantity of urine, and at the same time to be very thirsty and hungry, to lose her strength and flesh, and to have a dry skin. A fortnight before her death she had a troublesome cough; the left lung was found to be much diseased with a cavity at its apex; bronchitis was present in the right lung; she had never rashes on the skin, nor boils. The quantity of urine passed latterly had amounted to twelve pints in the twenty-four hours; it had a specific gravity of 1035, and smelt sweet, like apples. The treatment was palliative.

Post-mortem.—Emaciation extreme; right lung healthy; left pleura universally adherent; left lung completely disorganized with tubercles, with small cavities in various parts, and a larger one at the apex; kidneys hard, large, and of a whitish colour, separated with difficulty from their close adhesions to the surrounding tissues; uterus of the natural size, but bent forwards, lying on the bladder in a state of acute flexion.

Mr. Harrinson remarked that why the left lung was alone diseased, depended probably on its physical condition, being bound down by adhesions. He also made some remarks upon flexions of the uterus, to which he considered much more importance had been attached then they merited, more especially by M. Velpeau.

At the same meeting Dr. Cowan related two cases of diabetes mellitus, the one occurring in a boy aged 12, and the other in a lady. Both patients died comatose in a few hours. In reference to this subject he remarked, that while suffering from simple diabetes, the patient might exist a long time, but that changes were very liable to take place suddenly, which placed him in the greatest peril;—that diabetic urine from its limpidity passed through the kidney readily, but when its character altered, as for instance on becoming albuminous, then the kidney became blocked up, and the patient's life placed in jeopardy. He considered that where albuminous urine coincided with convulsions in puerperal women, the circulation had become impeded, the kidneys blocked up, and their excretion prevented, foreign matters were thus introduced into the system, and convulsions consequently occurred.

This last remark called forth the following interesting cases from Mr. Walford:—

Albuminuria.—Case I.—He attended Mrs. B, aged 29, in labour with her first child. The labour was somewhat tedious, and before its completion, a slight convulsion occurred. Afterwards the convulsions returned with increased force and frequency. The urine was found to be *highly albuminous*. She was successfully treated by cupping behind the ears and over the region of the kidney, by calomel and jalap, and a purging mixture. Consciousness was restored in three or four days, and convalescence rapidly established.

Case II.—He was called to a woman, aged 21, in labour with her first child; she was reported to have had two fits. He found her partly unconscious, pulse full and frequent, external parts hot and dry. She was bled, her urine drawn off, cold effusion applied, tartarized antimony given, the secale administered. The convulsions continued; pains were waited for in vain. The forceps were then applied, and the labour completed. The convulsions continued next day, though in a less degree, when consciousness was gradually restored. The urine was in this case of specific gravity

1016, slightly acid, and only became *slightly milky* by heat.

Mr. Walford remarked that he could not understand what the albumen had to do with the convulsions, inasmuch as their severity bore no proportion to the amount of albumen in the urine. He thought the more reasonable explanation was the effect of the more slowly-yielding parts engaged in parturition upon the cerebro-spinal system, that system being in a state different from health. This view he thought was confirmed by the fact, that primiparæ were generally the subject of convulsions, and by the treatment which was successful in proportion to the shortness of time occupied in relieving the womb of its contents. He thought that in the first case he had related there was disease of the kidneys of some duration.

Mr. Harrinson objected to the calomel given in the first case by Mr. Walford, and related the following case as confirming his objection:—

A man, aged 52, who had always enjoyed the best health, applied to him for some purging medicine. He said that his face and feet were swollen, his breathing was short, and his bowels much confined, that he had no pain in his back, and that his water was "*all right*." Every examination was carefully made, except that of his urine, and no disease found. Some purging mixture was ordered three times a-day, and one grain of calomel with each dose. The next day, when six grains of calomel had been taken, he found him in a state of most profuse salivation. On examination the urine was highly albuminous. He slowly recovered from this condition by bleeding and croton oil; the urine still remained cloudy. In these cases for the future he should not venture to give a single grain of calomel.

Dr. Cowan considered that in this case there was long-standing disease of the kidney, and that in acute cases calomel was not contra-indicated.

The question as to the propriety of administering mercury in any, and if so, in what, cases of albuminuria, is, I believe, still sub-judice. That great caution is required in its exhibition in puerperal convulsions, with albuminous urine, is supported by the opinion of Dr. Lever, who says, "this medicine I now only employ as a purgative in combination with other aperients, and even when exhibited with this view, great caution must be exercised, as the system is very readily affected by mercury in puerperal convulsions, attended with albuminous urine; and if once it be allowed to display its effects, the diarrhœa, insalivation, and consequent debility, are extremely distressing, as well as difficult to remedy."

With respect to the cause of puerperal convulsions, your reporter may perhaps be allowed to remark, that when we consider the almost constant presence of albuminuria in this affection, it is difficult to imagine that it has no share in originating the attack. Dr. Lever states that out of ten cases affected with these convulsions, nine presented the albuminous condition of the urine, while he had examined that secretion in fifty women during labour without ever detecting albumen, except in those who either had puerperal convulsions, or threatenings of them. The fact, moreover, that convulsions are liable to occur in the progress of *Bright's disease*, seems to point to the conclusion that those which take place during labour, are also connected with the albuminuria. In the one complaint we well know that urea is present in the blood, and its non-excretion is the probable source of the convulsions, and there seems to be no reason why the other complaint may not be accounted for in the same manner. At the same time the opinion of Dr. Tyler Smith may be quoted, as attributing these convulsions to derangement of the excito-motory system, their causes being either of a *centric* or *excentric* origin,—the first including *loss of blood, congestion, asphyxia from closure of the glottis*, and *emotion*; the second, irritation of the *incident nerves of the uterus, stomach, intestinal canal, bladder*, as well as of those which arise from the general surface of the body. And, as if on purpose to puzzle us, not only as to the cause, but also as to the most successful treatment of these convulsions, (about which later medical writers were previously pretty well agreed,) M. Leva, a Belgian physician, informs us, "that in the treatment of the paroxysm, he is strenuously opposed to artificial delivery, and places but little confidence in blood-letting. His chief reliance is on mercury, which he exhibits upon the principle that it diminishes the superabundance of fibrin in the blood, upon which he considers the disease to depend."—(*Ranking's Retrospective Address.*)

Bright's Disease.—I have already alluded to the question as to the propriety of administering mercury in cases of albuminuria. That instances do occur in which the judicious administration of that drug is productive of great benefit, is proved by the history of the following case, which was reported to the Society by Dr. Woodhouse on the 31st of March, 1847:—

John Wickens, aged 22, was admitted into the hospital on the 8th of September, 1846. He had always been a healthy man up to the 1st of June last, when, after drinking a large quantity of ale, he was attacked the same evening with profuse nose-bleeding, and on the following morning found his face much swollen. In the evening he felt pain in the legs, which soon after began to swell. From this time the œdema gradually extended to his whole trunk, and increased till his admission into the hospital.

At the time of his admission, the cellular tissue over the whole body was enormously distended with fluid; urine of a reddish brown colour, of specific gravity 1020, and very albuminous. He was ordered vapour-baths, aperients of compound jalap powder, and a diuretic draught, containing iodide of potass and tincture of squills, thrice daily. This treatment was continued without any material improvement in his symptoms from the 8th to the 12th. At this time, owing to his anæmic appearance, he was ordered the tartrate of iron, with the iodide of potassium, hot air-baths, small cuppings to the loins, and occasional aperients of bitartrate of potass. He was kept on this treatment until the 17th, when, although the urine was increased to double the quantity on admission, still œdema was not less, and the patient no better. On the 17th, (the

urine having been deprived of its albumen by heat, and found to be of specific gravity 1016, so as to prove that the saline ingredients were not much deficient,) he was ordered two grains of calomel, and a quarter of a grain of opium, night and morning. The steel was omitted, but the iodide of potassium continued; the air-bath was also gone on with. This treatment was continued until the 25th, when the report states that the "bowels are much purged, with griping; complains of great dimness of sight; no headache; urine gives a copious precipitate by nitric acid; œdema stationary." The calomel was then omitted, and the iodide of potassium continued. On the 30th, he caught cold by exposure, which brought on an acute attack of bronchitis, but this was subdued by venesection and leeches. His urine at this time was very scanty, and there was an increase of œdema. On the 1st of October, it was determined, in consultation with Dr. Cowan, to push the mercury in a mild but long-continued course, to test its efficacy, and the patient's capability of bearing it. Accordingly, one-sixteenth of a grain of the bichloride was given thrice daily from the 1st of October to the 5th of November. Acupunctures were also made on the outside of each thigh. From this time he began to mend. There was an excessive discharge from the punctures, the urine increased in quantity, spontaneous perspirations set in, so that by the 2nd of November all œdema had disappeared. On the 6th, he was ordered steel medicines, which he continued up to his discharge on the 30th, when he was free from all anasarca, although there still remained an albuminous condition of the urine, which had only a specific gravity of 1013. The patient returned only once to the hospital, a fortnight after his discharge, at which time he stated himself to be continuing well, and he has not since been heard of.

I have given so much space to the preceding interesting case, that I can only shortly notice the following exemplification of the same disease :—

On the 10th of June, 1846, Dr. Woodhouse presented to the Society a granulated kidney, taken from a man who had died in the hospital, with a brief outline of his case, and of the treatment during his abode in that institution. He had an attack of bronchitis, followed by pneumonia, and afterwards by erysipelas of the face, and died comatose. The urine was copious, high-coloured, always exhibiting albumen by heat or nitric acid. The case bore a striking resemblance both in its history and the appearance of the kidneys to Dr. Bright's first case. It appeared probable that the foundation of the disease had been laid by the intemperate habits of the deceased.

Calculus Vesicæ.—On the 30th of December, 1846, Mr. Dunn presented a calculus, taken from a boy, aged 10, by the lateral operation, in this hospital, by Mr. Maurice. It consisted of a lithic acid nucleus, with phosphatic deposit. Its weight was two drachms eighteen grains.

Dilatation of the Kidney.—On the 31st of March, 1847, Mr. Harrinson exhibited the bladder, kidneys, and ureters, of A. B., a coachsmith, aged 26. Mr. Harrinson having been suddenly called to him, had found him affected with great difficulty of breathing, and intense anxiety of countenance. The chest was well formed; the respiratory murmur puerile, audible over the whole chest. Antispasmodics, nauseants, &c., were given, without benefit. The next morning he was found comatose, and he died in thirty-six hours. The history, as far as it could be collected from his friends and fellow-workmen was, that he had for some time suffered from excessive thirst, drinking five pints of water before breakfast, and a pailful during the day.

On a *post-mortem* examination, the chest was found to be healthy; the stomach large; bladder much dilated. The left kidney formed a complete membranous cyst, not an atom of its original structure remaining, and both it and the ureter were fully distended with fluid; the ureter and pelvis of the right kidney were also excessively dilated.

Mr. Harrinson enquired what were the causes in this case of the dyspnœa and fatal results? Irritation of the stomach might occasion it. There is a case related in the last number of the "Guy's Hospital Reports," where dyspnœa was the only symptom of scirrhus of the pylorus. The only other cause he could find was the disease of the kidney. The lungs would take on a vicarious action to get rid of the urea, which, by poisoning the blood would irritate the heart, and thus account for dyspnœa. He offered this only as a suggestion, the most probable.

Other members seemed to think that the greatly-distended bladder, either by acting mechanically against the descent of the diaphragm, or by reflex action through the nerves, might have caused the difficulty of breathing.

It is singular that in this case no obstruction was discovered in the urinary passages which could account for the dilatation of the kidneys. The conversion of the kidney into a large membranous pouch, such as was brought under our notice, is, I believe, invariably effected by the mechanical pressure of fluid upon the structure of the kidney; and as in the present instance the bladder, both kidneys, and their ureters, were all dilated, it is most probable that some obstacle to the passage of the urine existed in the urethra.

VI.—Diseases of the reproductive system.

Ovarian Dropsy.—On the 5th of November, 1846, Mr. May presented a specimen of unilocular ovarian cyst. The sac was attached to the right ovary by a small pedicle, and might have been removed by a ligature. The patient was mother of two children, aged 45, catamenia regular. The sac contained about four quarts of the usual sero-albuminous fluid, and was adherent to the peritoneum, the latter being a fact of great importance. The patient was of a nervous temperament, easily excitable, almost verging on insanity, and was under the apprehension that she would become deranged. On this account Mr. May coincided with Dr. Cowan, who had previously seen her, that she could not be subjected to any medical treatment, and an operation was entirely out of the question. She pursued a quieting plan for some months, when she received the visit of a London

practitioner, uncalled for and unexpected, who urged the immediate removal of the tumour by operation. The proposal had such an effect on her mind, that acute mania followed, after which she became asthenic, and gradually sank. This case shewed how injudicious it is to depart from the usual medical ethics, as her death was certainly hastened by the improper conduct referred to.

Dr. Cowan said he had little to add to the observations of Mr. May. He had seen the patient at an earlier stage of the disease, which offered nothing different from the usual course of these complaints. He decided against an operation on account of the nervous temperament of the patient, and because adhesions were detected by the stethoscope. There was not the usual gliding sound, as in the healthy abdomen, and the skin was also adherent, which is indicative of the connections beneath. He had tried mercurialization and pressure, as recommended by Dr. Brown, but without benefit. The woman might have lived for years, as her health had not generally declined.

The question of ovariotomy is one of such importance and interest to the medical profession at the present time, that it would not, perhaps, be proper to pass it by in the present instance, without offering some remarks on its merits. The desire which was shown for its performance (in the case just reported,) by the London practitioner, (a great authority by the way in such matters,) when compared with the nervous temperament of the patient, and the existence of adhesions, as proved after death, makes one, I must confess, rather cautious in listening to the persuasions of its advocates. I will not say that there may not be cases in which such an operation is justifiable, nay, even desirable; but I suspect that when we except the cases in which the constitutional debility or nervous temperament of the patient is unequal to sustain it,—in which adhesions render it impossible,—in which the ovarian growth is of a malignant nature,—or in which it so slowly increases as not materially to affect the existence of the patient, that then, there will remain very few instances to which it is applicable. Unfortunately, while speaking thus against the general adoption of extirpation, medical means of cure equally fail us; and the hopes which a short time back Mr. Brown held out to us, of triumphing over this disease by the prolonged use of mercurials, in combination with pressure, tonics, and tapping, appear to have even deceived the discoverer of the new method himself; for Mr. Brown has lately informed the public that he has now given up the mercurial part of the treatment, which he had before stated to be the most important. That the existence of this disease, in some instances at least, does not so materially interfere with the health as to impair the proper functions of that system of the economy which it attacks, is proved by the following case of *pregnancy, complicated with ovarian dropsy*, which was related by your reporter to this Society, on the 5th of August, 1846.

Lucy Gilgrass, aged 37, was admitted into the hospital on February the 17th, 1847, suffering from ovarian dropsy. She had been under medical treatment for some time without benefit, and came into this institution for the express purpose of undergoing paracentesis. She first observed a general swelling of the abdomen six months back, and fancied herself pregnant, though she menstruated for two months' afterwards. The swelling did not begin in any particular part; since its first appearance it has gradually increased. Had no symptoms of diseased liver; tongue red and frothy; pulse 100, weak; bowels act regularly; is rather thirsty; appetite bad; sleeps tolerably; urine passed in the same quantity as when in health, rather high-coloured, but clear. The abdomen is now very much and symmetrically distended, measuring three feet ten inches in circumference, with evident fluctuation. Her breathing is not affected, unless when she moves.

On February 21st, the abdomen was punctured about two inches below the umbilicus, in the linea alba, by Mr. F. Bulley, and three gallons of a thick albuminous fluid, containing grumous matter and some blood, were drawn off, leaving the abdomen still partially distended, as was supposed, from cysts containing solid and fluid ingredients. The fluid drawn off weighed twenty-eight pounds, and was very coagulable by nitric acid.

On the 22nd, she was ordered a diuretic mixture, which she continued till the 27th, when she left the hospital much relieved. From this time I heard nothing of her till the 12th of June, when her medical attendant wrote me word that she had, quite unexpectedly to him, given birth to a child, healthy in appearance, and at the full period of gestation. The dropsical enlargement had at this time become quite as great as when she was tapped in February, and I heard some little time afterwards that she had been obliged to submit to paracentesis again. I have not since heard anything of her.

Acute Ovaritis.—While on the subject of ovarian disease, I may mention the following case of *acute ovaritis*, which your reporter brought under the notice of this Socieiy, on the 28th of April last:—

Mrs. W———, aged 40, a widow, had three children, has latterly suffered much at each catamenial period. On the 6th of March, while menstruating, was exposed to cold and wet; next day was seized with acute pain in the abdomen, and the catamenia suddenly stopped. On the following day he saw her, with great pain in the abdomen, sickness, anorexia, and general fever. The pain and tenderness were principally just above the left pubic arch. No tumour could then be made out. On the 4th day, however, a tumour of a lobulated feel, and the size of a lemon, was discovered. Leeches, saline aperients, poultices, &c., were ordered, and subsequently calomel and opium to affect the gums. Under this treatment the symptoms gradually subsided, the tumour disappeared, and the catamenia began to flow. By the 20th neither fulness nor swelling remained. Your reporter stated that authorities differed as to whether an inflamed ovary could be felt externally or not. English writers said it could not, whereas in French works on medicine it was stated to be readily felt. He thought that, considering all the

circumstances of this case, there could be little doubt that the tumour was ovarian.

Dysmenorrhœa.—From an affection of the ovary, to the disorders of menstruation, the transition is very slight, I shall therefore venture now to give a short abstract of a paper which was read by your reporter on the same evening, on "*Dysmenorrhœa occurring in Married Women.*"

Your reporter considered that writers on the diseases of women did not make a sufficient distinction between the disorders of menstruation, as they occurred in the married, and in the virgin state. In the latter, dysmenorrhœa is generally accompanied by a scanty discharge of the menstrual fluid throughout the whole period, or else, as the discharge becomes more free, the pain goes off, and then it evidently ceases to be a case of dysmenorrhœa. Subsequently to marriage, however, his experience led him to infer, that painful menstruation had nothing to do with the amount of the catamenial flux. Although the pain generally commences before the flow is established, yet the discharge comes on sufficiently copious, and continues so throughout the whole period without alleviation to the suffering. There is also considerable difference in the character of the pain, which in the virgin is chiefly referred to the lower part of the abdomen; while in the married woman it is referred to the back. With respect to the pathology of dysmenorrhœa in married life, he considers that it is generally dependent upon engorgement of the cervix uteri; and that, therefore, the rational mode of relieving it is by leeches to the uterine neck, or by the application of nitrate of silver in the solid state, or in a saturated solution to the same part during the intervals of the monthly periods.

Apoplexy of the Placenta.—On the 30th of Sept., 1846, Mr. Walford stated that in August, 1844, he had presented a specimen of a placenta, affected with what is termed apoplexy of that organ, which had probably been the cause of the death of the child. The same woman was this day delivered at the full time of a small child, being herself a stout person. She had a sharp attack of fever about two months since, in which he thought she would have miscarried. The placenta, (which was exhibited,) although in other respects apparently healthy, contained a number of gritty points, with several masses of the same apoplectic effusion as characterized the former one. It was suggested at the time of the former labour, that if she were to nurse a child for some months, it was probable that at some future period she would bring forth a more healthy child; unfortunately she was not in circumstances to follow this advice. It was probable now, that if she were spared to nurse the present child, and should have another, it would be more vigorous and better developed.

Corroding Ulcer of the Uterus.—Among the diseases, however, of the reproductive organs, which has been brought under our notice during the past year, the most interesting is the following case of corroding ulcer of the uterus:—

On the 28th of April, 1847, Mr. Vines presented the uterus and bladder of Mrs. H., aged 59, married, who came under his care, January 20, 1847. She was of spare habit, and complained of pain more or less at the lower part of the bowels. She had a muco-purulent discharge from the vagina, which first appeared in June, 1846, and gradually became very offensive. The speculum displayed a large ragged ulcer, which had entirely destroyed the cervix uteri, and exposed the cavity of the uterus. The edges of the ulcer were livid, tolerably well-defined, and not apparently thickened. The treatment consisted of sedatives, injections of warm water, of nitrate of silver, and black wash; subsequently blue-pill was given to affect the mouth. In a short time she was unable to retain her urine, which constantly escaped. At length hæmorrhage took place and she died April 3, 1847.

Post-mortem.—Present,—Dr. Wells. The ulceration was found to have extended to the posterior part of the bladder. The vagina, uterus, and bladder were all laid open into one cavity. The fact to which Mr. Vines wished particularly to call the attention of the Society, was the trifling degree of pain of which she had complained. This was the peculiarity of the case. The disease was not cancer, it differed in its history and symptoms. He concluded it to be *corroding ulcer of the uterus.* It had a livid edge, not unlike syphilitic ulcerations; this was his reason for giving blue pill. The rectum was free from disease. There was no deposit in the surrounding tissues, and the rest of the uterus was healthy. He referred to the opinions of Ashwell, Churchill, and Baillie, on the nature of this disease.

The following is Dr. Ashwell's definition of this affection, with which the case related by Mr. Vines will be found to correspond:—"An ulcer of granular surface, commencing at the cervix, rarely of large size, but destroying life by a corroding or eating away of the uterus, even to its fundus, and occasionally implicating the bladder, vagina and rectum. There is less pain than in cancer of the womb, from which it also differs in there being no indurated deposit, no immobility, and no fungoid growths in the seat of the ulceration. It is malignant, and except in its early commencement incurable." The rarity of its occurrence may be supposed, when we find the same author stating that he thinks there has not yet been received into the ward appropriated at Guy's Hospital, to female sexual diseases, one example of the malady, and that out of five hundred recorded histories of female sexual maladies in that institution, he does not find one of this affection.

Fibrous Tumour of the Uterus.—Another instance of how little pain, or even inconvenience, is experienced in some of the serious affections of the uterus, may be found in the following case of fibrous tumour.

On the 30th of December, 1846, Dr. Woodhouse presented an enormously-enlarged uterus, the subject of which had not suffered any previous pain, and was not aware of its existence, until he had called her attention to it. The only thing she complained of was œdema of the legs, and of the integuments of the abdomen. The œdema was relieved by the ordinary means, and she continued tolerably well for eighteen

months, when she was attacked by profuse hæmorrhage, and died asthenic.

On examining the body the uterus was found rising nearly midway between the pubes and umbilicus, and extending across the cavity of the pelvis, attached to the brim on each side. On making an incision into the organ, it was found to consist of a solid fibrous mass, occupying the whole structure of the womb, with a nodule of a softer consistence on the fundus. On the left side was a small cavity filled with blood. The natural cavity of the uterus seemed almost obliterated, the probe passing a very little way above the os tincæ. The ovaries were converted into large conglomerated masses of the size of an orange, presenting a number of nodules, some of a dark colour on the surface. To the left ovary were attached two large cystic tumours, filled with from two to three ounces of transparent fluid.

Dr. Woodhouse, in remarking on the existence of so large a transformation of the uterus without pain or much derangement of the health, mentioned the case of a lady, who had suddenly discovered that she had a tumour of the uterus, the size of a child's head, and whose general health was not affected.

Mr. F. Bulley stated that he had met with several cases, where patients had died of other diseases, and where, after death, fibrous tumours were discovered, the existence of which had not been suspected.

Dr. Cowan said that in his experience, such patients do not suffer usually much pain or inconvenience.

(To be continued.)

ON PARALYSIS FROM THE EFFECTS OF MERCURY AS A MEDICINE.

By Robert Storrs, Esq., Surgeon, Doncaster.

(Read before the Sheffield Medical Society.)

Mercury has been long known to be an active and frequent cause of paralysis in its various employments in arts and manufactures, or in the working of mines from which it is obtained; but its power of producing remotely paralytic diseases has been seldom alluded to. As this is, however, a circumstance of great importance, I think it well deserves especial notice, and I therefore propose to make this effect of the mineral the subject of my paper for this evening. I do not think I need make much apology for so doing when we consider the awful consequences involved. The life of the patient may probably be cut short, or at least his future comfort and happiness so affected that life may become a wearisome burthen, instead of an enjoyment and a blessing. And when we consider also how often this risk is run in the manifold diseases in which mercury has been given, in one form or other, for many years past, it should inculcate in us a serious lesson of carefulness and watchfulness, and should cause us to endeavour to guard against its effects, either on peculiar idiosyncracy, or during its rapid or prolonged use. We often flatter ourselves with the supposition of having been able to shorten the course of this or that disease, by the promptitude of our treatment, frequently including in that treatment the exhibition of this drug; but we might moderate our exultation were we able to look back upon the ruined constitutions, the disabled limbs, or the shortened lives, which a rash, prolonged, or sometimes even uncalled-for use of this active mineral has produced. The shortened lives may be forgotten, and the ruined constitutions unheeded, but the disabled limbs often remain as lasting monuments of the carelessness, the wilfulness, or the ignorance of the practitioner. These are painful reflections, but they must have occurred to almost every conscientious practitioner, in the solitude of the closet, or in the silence of the night, when we are but too apt to magnify our own errors, or to exalt the successes of others. We will, however, dismiss this unwelcome train of thought, satisfied that such reflections are often productive of beneficial warnings.

I shall not dwell at this time upon that most numerous class of diseases, the complications of inflammation with loss of power,—with ulceration, absorption, phagedæna, or gangrene, which often result from the use of this drug, nor on the even still more immediate effects of it as connected with ptyalism, but shall proceed in the first place to consider the wholesale paralytic effects of this agent as observed in mines, or in manufactures in which its use is extensively required. These general, and afterwards the more special, paralytic consequences of its effects, such as the "tremblement mercuriale," differ considerably from the more special paralytic disorders, as hemiplegia and paraplegia, which follow occcasionally its undue exhibition as a remedial means. In treating the subject, however, I do not mean to advance any theory which shall altogether militate against its legitimate use, as there are, I conceive, diseases in which its careful administration is, and always will be, of service, but merely to convey a lesson of carefulness and of foresight, even in the most moderate and necessary use of it. I would, however, especially condemn that headlong system of treatment which pushes (in almost all inflammatory diseases,) this active and dangerous drug rapidly to the point of producing ptyalysm, or to an approach to it.

Dr. Copland, in his valuable Dictionary, says, in digesting the accounts of several French authors, "that the mineral molecules of mercury, which, either in form of vapour, or of minute disintegration, come in contact directly, indirectly, or immediately, with various parts of the body, are extremely frequent causes of disease in artisans; and of mineral substances thus applied, mercury is one of the most common causes of disease of artificers, particularly workmen in quicksilver mines, glass-platers, &c. Amongst the most important affection produced by the fumes or oxides of mercury in artisans, is the mercurial

palsy, the 'tremblement mercuriale' of the French pathologists. It is almost, but not altogether, peculiar to these people. Its approach is generally gradual, but occasionally sudden; it usually commences with slight convulsive snatches, followed by agitations and tremors of the affected muscles, particularly those of the arms, which it first attacks, occurring, as it commonly does, in the workers of mercury." If the person continues his employment, the affection extends to the lower extremities and the whole body. He becomes incapable of muscular exertion, or even of the avocations requiring the least precision of muscular action. Restlessness, falling out of the teeth, constipation or disorder of the bowels, a dry brownish state of skin, slight atonic convulsions, cephalalgia, delirium, great depression of the nervous power, and of the general health, take place, in which state the patient may continue to live for many years.—*Merat* and *Colson*.

It is evident from this description, that mercury has, on an extensive scale, a decided effect upon the whole of the nervous system; but thus received into the system, either by the skin or the breath, in a state of fine dust or vapour, its effects are rather of a general than of a particular nature, as far as regards the brain, the spinal cord, or the nerves. Still it is possible,—I think even highly probable, that effects of a more local nature may be produced on the nervous system, when the mercurial is introduced into the frame by the more ordinary courses of medicinal action, of a severe or protracted kind; and that hemiplegia, paraplegia, softening or hardening of the brain, or of the spinal cord, may be then the consequence.

This I shall endeavour to point attention to by the following cases, which have passed under my own observation. They are not numerous, but the relation of them may possibly lead to the elucidation of the subject, by those who have a more extensive field for observation than I have. As such consequences are more or less remote, and unlike the more immediate effects of mercury, such as ptyalism, which are but too evident, I would not here be so bold as to advance an opinion, because such an effect as paralysis is *post hoc*, that consequently it must be *propter hoc*; but when many instances of a similar nature have happened under similar circumstances, we have a right to pause and consider if such an opinion as I now advance may not have some truth in it. I submit, however, the opinion with diffidence, as I am aware it requires much farther corroboration, and observations to be made on a much more extensive scale, followed by severe critical examination, before the truth of it can be fairly tested. My hearers will, however, have the opportunity of giving it the examination required; for as far as I have had means of judging from the accounts of cases of various kinds published from time to time in the *Provincial Journal*, there is no lack of the exhibition of this mineral in question, either in quantity or extent amongst the contributors to that Journal; and as it is also I believe much used in the manufactures of this town, the practitioners here will have peculiar opportunities of testing and of comparing the effects above stated, and about to be described, with the results of their own personal experience. The cases I shall bring forward are eight in number,—a considerable amount when the magnitude of the disorder, and the short period in which they have occurred, are taken into account, as they have all taken place within these two years. There are four of paraplegia, and four of hemiplegia, more or less mixed.

Case I.—Paraplegia.

Two years ago, a woman of depraved habits, tall and thin, about 46 years of age, underwent a course of mercury of a prolonged duration, for a syphilitic disorder, but was still not entirely cured of the disease, having many of those disorders of the throat and skin, &c., which are the combined result of mercury and syphilis. About six weeks after this course of mercury she began gradually to lose the use of her lower extremities, and in some degree the sensation in them also. The functions of the bladder and rectum were considerably impaired; large sores of the cellular structure of the legs also took place. All these symptoms became gradually aggravated in spite of blisters to the spine, the exhibition of strychnine, &c., and after some months confinement to bed, the cellular structure of the nates sloughed, beginning over the end of the sacrum, and she died a lingering and miserable death.

Case II.—Paraplegia.

A poor man, previously healthy, whilst in a state of mercurial action for gonorrhœa only, under the directions of some quack, was exposed to wet during the whole of one night; a few days afterwards he was taken with shivering, followed by great pain in the lower extremities, which presently became numb and useless; the power of evacuating his urine was lost, and all control over the rectum. The urine was drawn off by the catheter for some time, but the operation became more and more difficult from the previous state of inflammation in the urethra. The whole of the lower extremities at length became as if dead, cold, discoloured, and threatening mortification. Sloughings took place extensively from the sacrum and nates, and he was soon released from his sufferings. The mind, and the physical functions of the upper part of the body, remained entire until the last.

Case III.—Paraplegia.

A married man, nearly 60 years of age, became the subject of chancre of the penis, and gave the disorder to his wife also. It was a deep-seated and spreading sore, and after he had for some time undergone preliminary treatment to arrest the spreading of the sore, he was put under a course of mercury, which was carried on very carefully until the sore healed, that is, for five or six weeks. Some weeks afterwards he began to experience considerable pains in the lower extremities, and in the loins, and felt himself obliged to obey

the calls of nature the instant they were made, besides feeling considerable weakness in his legs; his gait became awkward; retention of urine came on, and suddenly he found himself entirely deprived of the use of his legs. In this state he remained several months, being constantly threatened with sloughing of the nates, and being obliged to have the bladder emptied by the catheter. Superficial abscesses and extensive ulcerations broke out in both legs, and were very troublesome. Blisters to the sacrum, strychnine, &c., were tried, but without any good effect, and he still remains a perfect cripple, unable to make the least use of the lower extremities, though in other respects in excellent health.

CASE IV.—PARAPLEGIA AND PARALYSIS.

A man, 45 years of age, by trade a printer, some weeks after having undergone a course of mercury, for a complaint, (not syphilitic,) was seized with gradual loss of power in the lower extremities, and partial loss of speech. He underwent a great variety of treatment, but when I last saw him had not recovered either his speech or the power of his limbs, though the disorder had been of some years' duration.

CASE. V.—PARTIAL PARAPLEGIA AND HEMEPLEGIA.

A stout young woman, in a farmer's service, suffered from a syphilitic disorder, for which she took mercury without much care or precaution for some time. She fell ill, and ceased to menstruate. After this she was frequently subject to epileptic seizures, which at length were so frequent that she became quite childish. During a succession of these attacks she first became hemiplegic and subsequently paraplegic, so that the use of the left side and of the lower extremities was almost entirely lost. From want of power of retention, the urine produced a large slough from the nates, from which she slowly recovered, but during the recovery of the sore the paralysis got nearly well, so that at this time, though there is still a large and deep sore in the nates, she has nearly recovered of the paralysis, and has not had an epileptic seizure since.

CASE VI.—PARALYSIS.

A young man of dissipated habits underwent a severe and protracted course of mercury for a syphilitic disease, which enfeebled him very much. Immediately after it he was seized with a severe attack of typhus fever, from which he recovered with great difficulty. He remained convalescent for some time, and was then seized with paralysis, hemiplegia of the right side, partial loss of speech, &c.; his mind became enfeebled, and after two or three more attacks of paralysis he gradually sank.

CASE VII.—PARALYSIS.

A young man, by trade a compositor, underwent a tedious course of mercury for a chancre of the penis. After some weeks he began to perceive a difficulty of speaking and in walking. He communicated his words like a drunken man, and began to stagger in his walk, so much so that if any one touched him he fell. He remained in this state about a year, the disorder being partly attributed to the absorption of metallic matters in his trade. He gradually got worse in spite of all that was done for him,—as cupping, blisters, tonics, sea air, &c., and was at length obliged to give up business, the difficulty of speaking and loss of power in walking having increased to such a degree that he could not make himself understood. His mind also had become greatly enfeebled. One day after a hearty meal, he was seized with severe hemiplegia, from which, after a few days, he recovered in a great degree. Another similar attack has since occurred from which he has also recovered; but he now remains a complete wreck both in body and mind.

CASE VIII.—HEMIPLEGIA.

A woman, of depraved habits, about 55 years of age, who had undergone many courses of mercury during her lifetime, was seized sometime after having undergone one, with severe paralysis, (hemiplegia,) and after two or three repetitions of the seizure she gradually sank.

It must be confessed that the number of cases adduced is not great, but as it is only within the short period of two years that my attention has been directed to the subject, it is probable that a future opportunity will afford me a larger number.

I shall offer no explanation of the *modus operandi* of mercury in producing paralysis; observation and experience have long ago proved it to have the power of causing one kind of paralysis, (the "tremblement" before mentioned,) which may be accounted for in some degree by the continued state of irritability and excitement, and subsequent depression, or diminution of tone, into which the nervous system is thrown. At the same time that the vascular system is exhausted by the great increase of its secretions, the blood itself is also known to be considerably deteriorated, both as regards the quantity of red particles, and of coagulable lymph contained in it. These effects we also know to be extensively the case when mercury is exhibited as a medicine; the nervous irritability of the patient is vastly increased, his muscular strength reduced, his pulse increased in rapidity, but diminished in strength; his secretions are depraved, excited, altered, diminished, or increased; the skin, the salivary glands, and the mucous membranes, especially those of the bowels, are all unduly stimulated, their capillaries relaxed, and the blood itself altered and depraved; ulcerations and serous effusions are produced, and the effects of a general want of adhesive power are observed throughout the whole system. I can say nothing on the pathology of the disease, as I do not consider a knowledge of it essential to the subject of my paper, which is merely to point out the probability of certain effects resulting from certain causes. I would, however, state, that whatever morbid changes may be observed in diseases thus produced, or supposed to be so, may be altogether similar to those generated by other and more common causes. The action of mercury would be, to induce a strong predisposition to the deposition of serum,—to the process of

ulceration,—to local inflammatory action,—to congestion,—and would differ little, but in strength or rapidity, from any other cause, such as dissipation, intemperance, or depraved habits, which also exhaust the system, and give rise to effects similar, but generally less in degree, than does this powerful medicine.

I have now brought these imperfect observations to a close, and shall make no apology for them beyond this, that it is probable, had it not been for the kind invitation of your Society, and for the favourable reception it was pleased to give me on a former occasion, that they would have remained the inmates of my own thoughts, as I should not have dared to give them to the medical world, unless years of experience had proved the frequency and the truth of the facts.

CASE OF DELIRIUM, SUCCESSFULLY TREATED WITH SEDATIVES.

By E. Copeman, M.D., Coltishall.

On the 14th of May I was requested to visit Mr.——, a farmer, between 50 and 60 years of age. This patient is short in stature, rather corpulent, head round and large, neck short and thick, eyes prominent. He has several times in his life been the subject of severe head-affection, for which he has been treated by copious and frequent bleedings, and other antiphlogistic remedies; and once he was also freely salivated. On one occasion he did not regain his mental powers for several weeks after he had quite recovered his bodily health. In December, 1842, I attended him during nearly three months for an inflammatory affection of the kidney, accompanied with severe constitutional disturbance and anomalous symptoms about the head. From this illness he completely recovered, and was bled at the onset of the disease. In July, 1846, on returning from a fair late at night in a state of intoxication, he was thrown out of his gig, and received a severe blow on the head and left shoulder. I saw him next morning; he was a good deal bruised, and suffering from concussion of the brain. During the treatment he was twice bled, and after a severe and threatening illness, he recovered in five or six weeks. He drinks "small beer" rather freely when at home, but is in other respects temperate; when at market, or in company, he is liable to be thrown off his guard, and once excited is almost sure to go on to intoxication. This effect is produced without taking much in quantity, and the kind of stimulus he takes upon such occasions is generally porter, or spirits and water. He is of a quick, irritable temper, and occasionally apt to despond. He is also a great snuff-taker. Two or three days before I was summoned to him he had "taken too much," and afterwards complained of slight confusion of thought and restlessness of temper, for which he had a great desire to be bled; from former experience he placed great reliance upon bleeding, and he particularly requested me to perform the operation. I noticed that he was not so stout as before his accident last year; but as his pulse was good, his face flushed, and his eyes injected, I yielded to his entreaties, and drew about ten ounces of blood. He complained of a fixed pain in the right temple, extending over the space of half a crown. His tongue was white, his breath offensive, and his bowels confined. Perspiration neither profuse nor deficient. Ordered a dose of blue pill and rhubarb, followed by senna draughts.

Next day, 15th, he said he was no better, and hinted at being bled again, but I saw no indication for it, and declined. Purgative medicines continued.

16th. To-day I found him more hurried and confused in his mind; he was in bed; had had no sleep; very little perspiration; head very hot, and feet generally cold. At one time in the morning he had something of a convulsive fit, his features having been contorted, and his limbs agitated; the pain in the head continued, but still circumscribed to the same spot; his pulse was quicker, about 80, and his countenance was flushed; his bowels had acted twice; the first evacuation was very pale, the second more coloured. Continued the purgatives, gave a fever mixture, and applied hot flannels to the feet, and cold water to the head.

17th. No sleep during the night; delirium increased, but he is not violent unless opposed; still pain in the head, but pulse not so rapid, nor so much fever as yesterday; no tremor; bowels acted once, motion darker coloured; tongue a little cleaner; attempts to answer my questions, but after beginning to do so, and showing that he understands them, he leaves off abruptly, and can no longer collect his thoughts. Empl. Lyttæ nuchæ. Calomel, gr. v.; Pil. Opii, gr. j. hora somni sumend. Contin. Mist. Sennæ.

18th. Again no sleep; face flushed; pulse 70; delirium same as yesterday; tongue less furred; bowels sluggish. Aperient draught, with Tinct. Hyos., dr. ss., every four hours. Calomel and opium again at night.

19th. Bowels relieved, and motions dark; scarcely any sleep; is very restless, talking incessantly in a very incoherent and indecent manner; although there is no tremor, his delirium to-day is characteristic of delirium tremens, and the febrile symptoms have diminished; digestive organs improved, the liver acting well, and the tongue being cleaner. The following mixture to be taken at intervals in the course of twenty-four hours:—

R. Solut. Morph. Acet., dr. ij.; Sp. Lavend. Comp., m. xx.; Mist. Camph., oz. vj. M.

20th. Face less flushed; feet warm; more perspiration; pulse 170; tongue cleaner; but he has had very little sleep; his delirium continues, and he has been occupied with making his bed, and walking round it repeatedly this morning. The mixture to be taken more frequently.

21st. Delirium not so constant; his conversation less immodest; answers questions pretty well, and always knows me. He told me to day that he had fears of poison, and asked me to analyse a piece of cake, some of which he had eaten, although almost directly afterwards he said I might eat it if I liked. He sent his wife out of the room to tell me this by myself, and enjoined me to secrecy. Quantity of solution of morphia increased to dr. iiss. in the mixture; senna

draughts repeated, and Pil. Sap. cum Opio, gr. v., given at night.

22nd. Slept two hours at a time twice last night, and is decidedly better; pulse 60; countenance natural; no tremor; less talking; no allusion to the poisoned cake to-day. Mixture continued, and the pill again at bed-time.

23rd. More sleep, and is better in all respects. Contin. Mist. Pil. et Haust. purgans.

24th. Slept nearly all night; found him dressed and walking about his house; looking pale, and feeling weak, but otherwise very much better; quite rational and free from pain; bowels open; took some meat yesterday for dinner and enjoyed it; has had no beer or other stimulus at present.

R. Sol. Morph. Acet. dr. ij.; Sp. Lavand. Co., m. xx.; Inf. Gent. Co., oz. vj. M. Capt. oz. j., ter die. Pill at night, *if restless*. To continue meat for dinner *if he have appetite for it*.

26th. When I called to-day, to my surprise he was gone about his farm with his gun, and I did not see him.

28th. Again found him out. He has slept well each night, and he has taken his medicine less frequently. His wife thinks him as well as usual, except that his temper is more irritable. He has continued well up to the present time.

Remarks.—There is still so much obscurity in the physiology and pathology of the nervous system, that there is scarcely any safe guide to the treatment of nervous diseases, save that which is derivable from experience; and it is therefore desirable that cases which are calculated to throw light upon this intricate subject should be carefully and faithfully recorded. Delirium tremens is one of the diseases about which great uncertainty prevails, and practitioners are at variance with regard to its proper treatment. Opium is generally considered the sheet anchor; but a celebrated American physician has recently denounced it as improper. It is not my intention to enter generally upon the subject of *delirium tremens*, which is without doubt very frequently a fatal disease; but only to shew that, however well understood when unmixed and genuine, it may make its appearance under circumstances of complication, which materially interfere with facility of diagnosis and certainty of treatment.

Mr. —— had been accustomed, for years before I knew him, to be bled and cupped; sometimes on account of severe cerebral disorder, sometimes because he thought he required it. By my advice he has broken through the habit, and for several years has lost no blood except on the occasions referred to in the case. His last illness was very slight before he was bled; it very much increased afterwards, and assumed a character of inflammation which seemed to indicate the necessity for further loss of blood. The delirium, pain in the head, flushed face and suffused eyes, rapid pulse, and costive bowels, seemed to point out that his cerebral symptoms arose from inflammation, and the probability was increased by the supervention of convulsions. The relief produced by copious blood-letting in his former attacks appeared to afford a clue to the nature of the disease, and an indication of treatment in the present instance. But I noticed that in constitution he was retrograding; that his bulk was diminished within the last twelve months; that his attack came on gradually, after drinking, and that his symptoms were worse rather than better after the bleeding; that although there was delirium, and that severe and constant, it was not the violent raving of phrenitis; that although his head and upper parts were hot and flushed, his feet were generally cold; that although his pulse was rapid, it was not hard and wiry; that his constipation seemed to depend upon general derangement of the chylopoietic viscera; and although convulsions under such circumstances are generally supposed to indicate meningeal inflammation, I thought it possible they might arise here from deficient controlling power in the brain. There were undoubtedly *symptoms* of inflammation present, but they were not unequivocal; there were also probable appearances of delirium tremens, and I felt sure that if the latter predominated, and I treated the former with activity, I should be likely not only to render the signs of delirium tremens more determinate, but also to render further treatment unavailing. It was possible too, that much of the cerebral disturbance arose from disorder of the digestive organs, and it was at any rate safe and proper to put them in order.

This course was therefore taken; the bowels were emptied, a flow of bile produced, warmth excited in the extremities, cold applied to the head. The consequence was the disappearance of the symptoms which led to the apprehension of inflammation of the brain, leaving those of delirium tremens, though without tremor, so obvious, that further difficulty as to diagnosis was at an end. The rapid cure of these latter by opium is strikingly in favour of its employment; and the testimony of many practitioners in this country amount almost to a certainty as to its value, when used with judgment and discrimination. My impression of the case above narrated is, that the bleeding in the first instance was either unnecessary or injurious, and that if I had acceeded to the wishes of the patient and his friends by repeating it, he might like many others, have fallen a victim to delirium tremens, or have drawn on a prolonged existence with some paralytic defect.

Coltishall, June 23rd, 1847.

ON SACCULATED ŒSOPHAGUS CO-EXISTING WITH STRICTURE.

By W. C. Worthington, F.R.C.S., Senior Surgeon to the Lowestoft Infirmary.

(Read at the Annual Meeting of the Suffolk Branch of the Provincial Medical and Surgical Association, held at Beccles, June 17, 1847.)

Judging from the few cases furnished by English medical authorities, sacculated œsophagus, co-existing with stricture, may be looked upon as a pathological deformity of uncommon occurrence. Among Continental writers, Isenflam and Sandifort have alone

noticed it. Two cases are described by British practitioners; one by Mr. Ludlow, surgeon, of Bristol, the other by Sir Charles Bell.

An account of Mr. Ludlow's case is to be found in the third volume of "Medical Observations and Enquiries," headed, "Obstructed Deglutition from a Preternatural Dilatation of, and Bag found in, the Pharynx," detailed in a letter from Mr. Ludlow to Dr. William Hunter, illustrated by engravings, read August 27th, 1764. The subject of this case was a man nearly sixty years of age. The disease was supposed to be caused by a cherry stone having lodged in his throat, but was coughed up at the end of a few days. Death did not take place till five years after this occurrence. Upon a *post-mortem* examination, a muscular bag was discovered, passing down between the œsophagus and vertebræ. It was described as being formed by a dilatation of the entire substance of the pharynx, the uniformity and thickness being so exact that it was impossible to ascertain at what particular part the dilatation began. Mr. Ludlow accounts for the formation of this pouch in the following manner:—"It is highly probable," he says, "that the cherry stone must have been forced between some of those irregular loose folds which abound in the lower part of the pharynx; and as the patient during that time ate his meals as usual, the stone being forced on by the aliment, in the act of deglutition, might create a cavity at least equal to its own size, and, perhaps, even larger, from the addition of some of the aliment. The stone, when returned, of course left a cavity which became a recipient for particles of food, and thus by degrees it increased in size."

At page 64, in the second volume of Sir C. Bell's "Surgical Observations," is described a case of a preternatural bag, formed by the membrane of the pharynx. The subject was a gentleman, who applied for relief owing to a disease of the throat, which gave him great uneasiness, and occasioned difficulty of swallowing. Many ineffectual attempts were made to pass the bougie. Death, however, was not ascribed to the complaint in his throat, but from what cause, is not stated. After death there was found a bag projecting from the lower and back part of the pharynx, pushed into a space between the œsophagus and spine. The bag was not covered with muscular fibres, but is described as a hernia or protrusion of the inner coat of the pharynx, between the strong fibres of the muscular coat.

With these few observations I shall now proceed to a brief statement of the case which has recently come under my notice.

Colonel D., aged 69, of a robust constitution, had the greater part of his life indulged an enormous appetite. Three years previous he experienced slight dysphagia, which continued for eighteen months without any apparent aggravation; his general health continued unimpaired. In the months of January and February, 1846, deglutition became more difficult, accompanied with a degree of emaciation. In July following he came under my care; there then existed considerable difficulty in swallowing solids, which required to be finely comminuted before they could be made to pass the œsophagus. Just about this time Mr. Crosse saw the patient in consultation with me. A probang was introduced into the œsophagus, which became obstructed at or near the cricoid cartilage.

This operation was afterwards repeated at intervals, but I could never succeed in passing the instrument beyond what was considered the seat of stricture. It was remarked during the progress of the symptoms, that at each meal a portion of food appeared to be swallowed, but was shortly returned unassimilated, the process very much resembling that observed in the ruminating class of animals. Eventually the patient became totally incapable of swallowing food even in the most attenuated form.

For three weeks previous to death, which took place the following month of October, he was solely sustained by a pint of strong beef-tea, containing a glass of sherry, injected up the rectum every eight hours.

The pharynx, œsophagus, together with the larynx and trachea, were carefully removed for the purpose of inspection. A pouch or bag was discovered proceeding from behind the œsophagus opposite the cricoid cartilage, which must have hung down between the trachea and cervical vertebræ. Nearly two-thirds of it was covered with muscular fibres derived from each of the constrictors, which were much stronger and more developed than in health. The pharynx was laid open by an incision, commencing from its posterior border in the direction of the median line, and continued into the pouch two-thirds of its length.

This exposed the entire pharyngeal cavity which was found dilated far beyond what is natural. Immediately behind the cricoid cartilage, and opposite the commencement of the pouch, there existed in the œsophagus a stricture, formed by a transverse fold of the mucous membrane, and which would only admit a large-sized urethral bougie. The œsophagus below the stricture was contracted, but its mucous membrane throughout healthy.

There can be little doubt that in this case the stricture was the primary affection, and that the pouch became developed in consequence. Had the nature of the disease been detected in its earliest stage, and carefully treated with bougies, in all probability the serious consequences which followed might have been averted, for in the preparation, (which was handed round,) there exists no degeneration of structure at the seat of stricture, the stricture being caused simply by a contraction of the mucous membrane, which no doubt might have been easily made to dilate.

Lowestoft, June 21, 1847.

ON TURNING IN LABOURS RENDERED DIFFICULT BY DISTORTION OF THE PELVIS.

By Thomas Radford, M.D., Consulting Physician to the Manchester Lying-in Hospital, &c.

Whatever practice can safely supersede the *murderous* operation—*craniotomy*, should be adopted. The records of operative midwifery ought not to be stained with so

barbarous a procedure, which, according to the present recognized principles of practice, is so unconditionally and so unhesitatingly performed. It is not, however, my present intention to enter on the consideration of such important questions, as the precise position which craniotomy should hold in obstetrics, and what other means should be employed; my views upon the treatment of labours protracted by distortions of the pelvis, are already known to many of the profession. It cannot be a matter of surprize that I should (entertaining opinions that craniotomy ought to be considered an operation of necessity, and not of election,) hail with delight any measure which only promises to lessen the number of these destructive operations.

Velpeau is the first writer who has practised turning the child in cases of labour protracted by distortion of the pelvis. He says—"Lorsque il n'y a qu'un des *diamétres obliques* de vicie, il en résulte ordinairement une disposition fort importante à noter. Si c'est à droite, par exemple, comme l'a vu Smellie et comme Stein en donne plusieurs figures, qu'existe le ressrerement, le côté gauche, pourra présenter une excès d'amplitude. Dans ce cas, si la tête vient l'occiput à droite, l'accouchement exigera presque nécessairement des secours, tandis que s'il s'etait présenté a gauche, la nature aurait pu se suffire à elle meme. Cette remarque indique assez que pour rendre l' accouchement facile chez une femme ainsi conformée, il suffit d'opérer la version, et d'amener le fœtus en premiére ou seconde position des pieds; de telle sorte que l'occiput puisse correspondre au côté le plus large au détroit. Elle explique aussi comment la même femme, étant accouché spontanément une premiére fois, ne pourra peut être le faire sans la symphyseotomie ou la section Cesarienne á la seconde, et *vice versá*.

En 1825, je fus prié de donner des soins à une femme que etait en travail depuis deux jours. La tête ne s'engageait point. J'allai chercher les pieds, et je terminai l'accouchement. En 1826, la même personne fut amenée a l' Hôpital de la Faculté etant en travail depuis quatre jours. Les eaux étaient écoulées et la tête fortement engagée. La matrice, très exactement appliqueé sur le fœtus, ne permit pas d'operer la version. L'application du forceps fut tenteé par Desormeaux, M. Deneux et moi; mais rien ne put faire descendre la tête. La cephalatomia devint indispensable. Cette femme, enceinte de nouveau en 1827, m'a fait prévenir bonne heure lors du travail. Je suis allé chercher les pieds, et tout s'est promptement et heureusement terminé. L'issue différente de ces trois accouchemens tient à ce que, dans un cas, le gros de la tête se présentant à droite, ou le bassin était fortement rétréci, ne pouvait franchir le détroit, tandis que dans l'autre, la version ayant ramené l' occiput à gauche où les dimensions naturelles étaient conservées, le passage de la tête, n'etaient plus impossible.—*Tome premier*, p. 38.

Before we have recourse to turning the child to supersede craniotomy, or other instrumental means, we should be fully satisfied that we do not thereby create equal, if not greater, evils. The first question to be settled is, can we safely turn and deliver the child? Here is involved a due estimate of the degree of distortion of the pelvis relatively to the size of the child's head, and likewise the condition of the maternal organic structures. Can we, then, measure with such mathematical accuracy the pelvic diameters, as to decidedly pronounce that the head of the child in utero will pass through unopened. If, after turning and extracting the body of the child, we cannot bring the head through the brim of the pelvis, we shall be compelled to use the perforator, which will now be attended by increased difficulty and danger, after having already exposed maternal structures to great hazard, by an unwarrantable operation. Perforation of the head of the child can be more safely and more easily performed, when it lies over, or partly within, the brim of the pelvis, than when the cavity is occupied by the body, as it is in footling cases. Is there not great danger of fallacy in computing the admeasurement of a distorted pelvis? From my own experience, I am fully convinced there is, I mean, relative measurement, especially when slight distortion only exists. I will briefly mention a case which strikingly corroborates the foregoing remarks:—

Dr. Hamilton, late Professor of Midwifery at Edinburgh, induced in the same lady premature labour at the seventh month in several successive pregnancies, after having in a former case used the crochet. She was the wife of a Colonel, whose regiment was stationed at Manchester. Being pregnant, the opinion of my respected relative, Mr. Wood, was requested, who, after a careful examination, decided that no distortion existed, and advised her to let pregnancy proceed. She was naturally delivered at the full period after a labour of shorter duration than ordinary, and recovered well. The child was of average size and weight, and its head as large and as much ossified as is commonly the case. This case is valuable on two accounts,—as first it proves the most experienced practitioner may err in ascertaining the precise dimensions of the pelvis; and, secondly, as a caution, not to rely implicitly on a professor's opinion.

Can we always deliver by turning? Certainly not. One of the cases mentioned by Velpeau illustrates this fully. It would be highly culpable to attempt turning with the passages undilated and undilatable, or when the liquor amnii has been some time discharged. Under either of these circumstances the child would perish.

Does turning give the child a better chance than might be afforded by other measures? As regards the crotchet, the answer is plain; but the long forceps, in the great majority of cases of slight contraction of the pelvis, may be more advantageously had recourse to.

Will the head pass through a less pelvic space when its base comes first, as in footling cases, than when the vertex presents? My opinion is, that it will not, unless such unwarrantable force is used as to risk the separation of the body from the head, leaving the latter in the uterus.

It has been, however, said, that the neck of the child alive, or recently dead, is so strong, as to allow such a degree of force to be used, as to greatly compress the sides of the cranium; but such a procedure is at variance with all scientific views, and incompatible with the safety of both mother and child.

Does the head elongate more readily upwards than downwards? If only the same degree of extractile force is used, it does not, and certainly not so safely to the child. But assuming that the child's head elongates as readily, if not more so, in footling cases, than in presentation of the vertex, we know that the funis is subject to fatal compression in the former,—which danger is greatly increased in cases in which the child has been turned, on account of distortion of the maternal pelvis.

Can the head of the child be adjusted and better adapted to pass through the widest portion of the brim of a distorted pelvis, by means of the leverage its body affords after it has been turned, than by any other means? Velpeau has great reliance on the advantages of turning in these cases; but unless all contingent circumstances are favourable for its performance, the operation is most certainly hazardous to both mother and child.

ON THE EMPLOYMENT OF TREACLE IN BURNS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

Respected Friend,—Observing from a communication which appeared in the last number of the *Provincial Medical and Surgical Journal*, recommending the employment of treacle as a dressing to burns, that the practice is not generally known amongst the profession, I beg to lay before the medical public a few cases, out of many more, in which I have successfully treated burns and scalds with treacle.

I remain, with much respect,
Thy sincere friend,
HENRY PAYNE, M.D.

Nottingham, 7th month, 8th, 1847.

Mary Parr, aged 70, of sanguine temperament, stout, and of intemperate habits, whilst sitting alone reading a newspaper by candlelight, accidentally set fire to it, and before the flame could be extinguished, it had spread to her cap and dress, inflicting a severe burn on the head, neck, shoulders, back, and breasts, but most severely on the back, where the dress was entirely burned off, and the cuticle destroyed. For the first three days after the accident she had been attended by a surgeon who had ordered the application of olive oil, but finding that she gradually became worse, he had despaired of her recovery.

On being called in, three days after the occurrence, I found her very weak. The burnt surface presented a livid hue. Treacle was directed to be immediately spread on every part of the burn, and a covering of linen-rag to be laid over it. The application was directed to be renewed at intervals of a few hours. A dose of mild aperient medicine and a saline mixture were prescribed. She was advised to live upon mild diet and diluents.

Upon seeing her next morning, she told me that she had felt no pain since the treacle was first applied, that she felt quite comfortable, and had slept tolerably well. The burn now presented a healthy rose-red appearance, and continued to heal under the same treatment until the epidermis was restored, which took place in a few days after my first seeing her.

Owing to great irritability of the nervous system in this patient, she was attacked with a sympathetic fever soon after the accident, which rendered my attendance necessary for a week or two after the burn had healed. It was successfully treated with saline medicines in camphor mixture, and occasional doses of opening medicine. I am informed that this unfortunate woman not many months after set fire to her clothes again in the same way, and before assistance arrived was so dreadfully burnt that she did not survive her injuries many hours.

M. A. P———, a female, aged 50, fell asleep in the day-time before the fire, near which a kettle of water had been placed, which, boiling over, the water fell on her foot, scalding the whole upper surface of it. This patient had received treatment for a fortnight previous to my seeing her, but not finding any benefit from it, she applied to me. Amongst the various remedies that had been tried at different times, were simple cerate and olive oil.

The scald was now looking highly inflamed, and discharged much serous fluid. Her general health was good, and it was thought unnecessary to administer any medicine internally, nor even to restrict her diet. I ordered the other applications to be discontinued, and the scalded surface to be well covered with treacle, and the dressing to be repeated three times every day, which, being followed by the usual happy results, was continued for a few days; at the end of this time I was pleased to find the part quite healed, and my patient returned to her usual avocations.

Edward Butler, a stout child, aged three years, was extensively scalded on the back, hips, and thighs, by falling backwards into a tub of boiling-hot water. I saw this patient soon after the accident, and directed treacle to be spread over the scalded surface without delay, and to be repeated according as the treacle became fluid and less adherent.

As might have been expected, the pain in this case continued, though much abated, under the remedy, and he obtained intervals of perfect ease, and slept soundly at times, lying continually on his face and breast. On the second day he became feverish, and a mixture of Epsom salt and infusion of roses was accordingly prescribed, which had a favourable effect.

The part was kept covered with treacle for three days, during which the wound had the usual healthy appearances, and was rapidly healing, when, owing

to intolerable itching having set in, the application of treacle was discontinued, and recourse had to sprinkling the part with flour, and applying distilled rose-water over that. Rose-water and flour were afterwards applied together in this way, which completed the cure at the end of a fortnight.

Remarks.—For upwards of twenty years I have adopted the above mode of treatment in burns and scalds. In all such cases which come under my notice, I order the treacle to be applied pure on the injured surface, and at the natural temperature; folds of well-aired linen being laid over it, and the dressing allowed to remain for two or three hours at first, when the treacle will be found in a more fluid state, hot to the touch, and the rag saturated with it. The treacle is then applied in the same manner, but after the second or third day of the burn, will not require renewing oftener than once or twice daily, and the treacle will now begin to preserve its usual consistence while in contact with the burnt or scalded surface. The time occupied in healing the burn is very much less than is the case when any other means are employed. On the whole I know of no remedy capable of exerting more beneficial effects in burns and scalds, however severe, than treacle; and I am fully persuaded that life might be saved in the most desperate cases by the timely and free application of this invaluable remedy. It acts by effectually excluding the air, and (as appears by the fact of the pain entirely abating, or greatly diminishing, as soon as it is applied,) by abstracting the morbid heat from the part, and thus proving at once sedative, refrigerant, and healing.

Hospital Reports.

ST. PANCRAS DISPENSARY.

CASES ILLUSTRATIVE OF THE CONDITION OF THE SYSTEM WHICH IS ACCOMPANIED BY OXALIC URINE.

By Edward Ballard, M.D., Lond., Physician to the St. Pancras Royal General Dispensary, and Medical Tutor in University College, London.

(*Continued from page* 378.)

Case III.—Hysteria.

G. C., residing in Somers Town, aged 20 years, by occupation a servant, has been out of a situation for the last four months, and has in consequence lived badly. She applied at the Dispensary on August 18th, 1846. Is naturally nervous, and of a very irritable temper. Has suffered from pain in her back ever since an attack of "inflammation in the left side of her chest," a year and a half ago, but it has been gradually becoming worse, especially during the last three months. She has always been subject to headaches, but they have been more severe during the last three weeks. Seven days ago, in consequence of getting her feet wet, as she believes, her throat began to swell, and she became hoarse, with much pain on swallowing, accompanied by alternate shivering and heat, all of which have continued till now, with the exception of the swelling, which in a great measure disappeared on the application of a sinapism. Still, however, there is some swelling, accompanied by tenderness, both on deep pressure, and on pinching the skin, as well as an inability to speak above a whisper. She has lost flesh, occasionally feels faint, and sleeps badly. Has had slight dyspnœa ever since her throat has been bad, but there is no cough. There is no visible redness of the fauces. She vomited some yellow matter, with mucus, yesterday, at the mere sight of food; suffers from thirst; habitually neglects her bowels. The headache is severe and universal, and she complains very much of smarting, occasionally shooting, pain, extending down the back, with tenderness along the whole length of the spine, even to the tip of the sacrum. There is some tenderness of the skin over the upper part of the chest; catamenia are present; pulse small and rather weak. Cucurb. Cruent. nuchæ, ad oz. viij.. R. Calomelanos, gr. v.; Pil. Zingib, gr. ij; Pulv. Jalapæ, gr. xv. Fiat pulv. statim sumend. et postridie repet.

Aug. 21st. Her voice returned before the cupping was completed, and there is not the least hoarseness remaining now; swallows readily, but the throat is still puffy and tender, and the breath short. States to-day that she is subject to a very slight cough, which she did not think worth mentioning before, but without expectoration, and, for the last month or two, to a pain under the left breast on walking, which is relieved by pressure. Bowels freely relieved; pain in back the same, but the tenderness is confined to the upper half of the spine, and chiefly on left side. Catamenia disappeared yesterday. Omni nocte sum. Pil. Rhei. Co., gr. v. R. Bebeerinæ Sulph., gr. v.; Extr. Gent., q. s.; pro pil. ter die sumend.

25th. Has been suffering from neuralgic pains, affecting left side of face and ear, which are tender. The shivering and heat are less troublesome, but the cough is more so, having acquired a belching character; has lost the pain in left breast, and the throat is less tender and full; otherwise the same. Pergat. To apply a sinapism every night along the spine for a quarter of an hour.

28th. Nothing amiss with the throat or face now, and the cough is much less troublesome. She has not vomited for two days. Pergat.

29th. Urine of this morning clear, with an abundant cloud-like deposit; specific gravity 1022; acid re-action. The deposit consists of octohedra, varying in size; some very large, and both separate and aggregated, along with a few mucus-corpuscles. In the evening of this day she was suddenly seized with giddiness, and fell down, remaining unconscious for several hours, but was not convulsed.

Sept. 1st. Has had severe shooting pains over the whole head, but the scalp is not tender; has not vomited any more, but the last two nights has eructated some very cold tasteless water, and has had loud borborygmi; sleeps badly at night; percussion and respiratory murmurs natural under the clavicles; bowels do not act properly. Omitt. pil. Nocte maneq. capt.

Pulv. Ipecac. Co., gr. v. Meridie sumat Pil. Rhei Co., gr. x.

2nd. Urine cloudy, and containing an abundance of large octohedra, which on the 3rd had fallen in the form of a cloudy deposit; re-action acid; specific gravity, 1014.

4th. Complains of pain in both iliac regions, of a shooting character, with tenderness, both superficial and deep. Bowels more regular, but the eructations continue; spinal tenderness the same. Has not used the sinapisms for some days. To re-commence use of sinapisms. Auge. Pulv. Ipecac. Co., ad gr. viij.

8th. No improvement. Auge Pulv. Ipecac. Co., ad gr. xij.

11th. Diarrhœa, with griping, occurred suddenly on the evening of the 8th, and has continued till to-day; the watery eructations, however, have ceased. Pain has been gradually coming on in the left shoulder, especially along the edge of the trapezius, and it is accompanied by tenderness. Catamenia appeared this morning. Urine of this morning is full coloured, of specific gravity 1013, and presents a rather dense deposit, containing an abundance of octohedra, and some crystals of uric acid. Omitt. Medic. To continue the sinapisms.

15th. Feels better, and appears more cheerful; very slight tenderness remaining in right iliac region; spinal tenderness distinctly less; catamenia very abundant. Urine of this morning acid; specific gravity, 1021; contains no oxalates, and only a slight mucous cloud at the bottom.

18th. Catamenia disappeared yesterday; has no headache, cough, or iliac pain, vomiting, eructation, or pain in the back; there is slight tenderness only in the lumbar and cervical regions; urine of about natural tint, of specific gravity 1019, acid; it threw down, on standing, a moderate cloud-like deposit, containing no octohedra, but some circular thin plates, some entire, and others broken.

22nd. Was seized on the 19th, in the afternoon, with headache and bilious vomiting; vomits now whatever she takes; feels more low spirited; bowels confined. Has had a return of pain in the left shoulder; tenderness and pain in lumbar region of spine only, and there is tenderness of the scalp. Urine acid; specific gravity, 1021; contains an abundance of octohedra. Pil. Rhei. Co., gr. x., omni mane sumend.

29th. Bowels have been freely opened daily, and the vomiting, and pain in shoulder soon ceased; has only slight pain now at the lower part of the back, and the tenderness is confined to this part also; still, however, she suffers from headache, and the scalp is tender. Discharged.

Remarks.—Whether we are to believe that this person ever suffered from inflammation within the chest, or whether, as is more probable, the illness which she thus designated, was merely a pleurodynia, she has ever since that time been out of health, and when she came under my notice was the subject of hysteria and spinal irritation. The influence exerted upon the symptoms of disease by the condition of the bowels, and occurrence of the catamenia, is deserving of remark, since it is one which is constantly illustrated in this class of complaints. As respects the urine, we have another example of the disappearance of the oxalate of lime on the full establishment of the catamenial flow, and also of the occurrence of the circular form of that salt. The effects of the recent cold under which the patient suffered were modified by the highly nervous condition in which it found her, the nervous symptoms prevailing over the vascular.

Case IV.—Hysteria.

T. F., aged 28 years, married, and of nervous temperament, has for the last two years been subject to close confinement as an assistant in a linen-draper's shop. Has in no way been intemperate in his habits. For the last eight months has lived badly, and during the last two still worse, in consequence of being out of employment. He applied at the dispensary on the 19th of August, 1846.

His illness commenced twelve months ago, by a sudden attack of diarrhœa, which weakened him considerably, and was followed even as he gained his strength by a sense of languor in the evenings, which gradually occurred earlier in the day, He was better in the winter, but at the commencement of the present summer began to feel nervous, and suffered from headache and diarrhœa after taking food. Soon after leaving his situation he began to experience watery eructations, and lately has found that he passed an inordinate quantity of urine, and has suffered from pain and a sense of burning in the left side. He is now pale, and the skin is disposed to perspire very readily. He states that he is extremely low spirited, frequently gives way to tears, and is readily alarmed, having become very timid, especially when alone at night. This timidity is accompanied by the hysteric globus. He has constant sense of weight at the top of the head, and a few days ago after a strong mental shock, laboured under the delusion that there were several persons in the room talking with him. Suffers from palpitation on the least exertion. He complains of an alternate sense of burning and throbbing, but sometimes sharp, pain in the left hypochondrium, with tenderness at the epigastrium and over all the left side of the abdomen, even on pinching the skin; there are no eructations now, but occasional borborygmi; lives now chiefly on bread and butter, and states that meat gives rise to a sense of epigastric weight. His bowels are irregular, at one time constipated, at another purged, and the food he takes sometimes occasions diarrhœa. The pulse is weak; tongue pale, flabby, rather tremulous, indented at the edges, covered with slight white fur, and watery. He complains of an aching pain in the loins, sometimes shooting round the abdomen, but chiefly to the left side; tenderness over spine, and especially on the left side of it, from the lower dorsal vertebra to the sacrum, pressure in this situation giving rise to a shooting pain over the left side of the abdomen. Urine exessively abundant and passed in large quantities every two hours; it was clear, acid, and on standing for thirty hours, deposited a slight cloud, consisting of aggregated minute fermentation globules, numerous small octohedra, with a few crystals of uric acid; the specific gravity was 1009; no albumen;

Trommer's test gave no indication of sugar. Ordered Bebeerinæ Sulph., gr. v.; Extr. Gent., q. s., pro pil. ter die sumend.

24th. No improvement in his general symptoms up to this time. Oxalates disappeared from the urine.

26th. Has been able to obtain some meat the last two days; rode as far as Finchley yesterday, and was less nervous all the day. Urine of last twenty-four hours, five pints, acid, pale, of specific gravity 1015; on standing thirty hours a slight cloud formed at the bottom, with minute dark points in it, which were found to be crystals of uric acid, while the cloud consisted of fermentation globules as before, with a very few, and those small, octohedra.

28th. Had some beef for dinner on the 26th, which did not agree with him, and he has not been so well since. Urine four pints in the last twenty-four hours, extremely pale, acid, of specific gravity 1002, containing abundance of globules as before, with vibriones and an occasional minute octohedron. Milk diet.

31st. Has taken bread and milk and finds it agree very well with him; he suffers no sense of weight after it. Rode to Hampstead yesterday, and felt much better afterwards, having lost his headache and the burning sensation in the side. Urine of the last twenty-four hours not quite four pints, slightly cloudy, with a slight cloud-like deposit, acid, of specific gravity 1016; deposit contains a considerable number of small octohedra and some crystals of uric acid. Contin. pil. Capiat Pulv. Ipecac. Co., gr. v., nocte maneque.

September 3rd. On the evening of 31st, in consequence of some mental annoyance, was seized with severe retching and violent headache, but both are now less; still complains of globus. Urine of last twenty-four hours three pints, clear, with a very slight cloud at the bottom, consisting of octohedra, acid, of specific gravity 1017. Admitted into University College Hospital. Contin. Pulv. Ipecac. Co.

9th. Has been in every respect improving since his admission into the hospital, and has been free from headache the last few days, since his diet has been improved. Sleep is defective. There is some tenderness over one or two of the upper dorsal vertebræ. Urine of specific gravity 1021; deposit as before, containing an occasional small octohedron. Contin. Pulv. Ipecac., Co. R. Ammon. Sesquicarb., gr. iv.; Inf. Gent. oz j.; Aq. Menth. Pip., oz. ss. Fiat haust. ter die sumend. A pint of porter daily.

From this time his health regularly improved. He slept better, and in a short time began to gain flesh and strength; his urine was occasionally examined but no oxalates could be discovered in it. Tincture of sesquichloride of iron was prescribed, and he was discharged on the 10th of October. There is reason to believe that during the latter part of his stay in the hospital he was very much exaggerating his complaints.

Remarks.— Although satisfactory instances have been recorded of paroxysmal hysteria in the male, such occurrences are to be regarded as amongst those rare phenomena which few are likely to meet with in the course of their professional career. Hysteria, however, is not a disease of paroxysms alone; it is more emphatically still a state or condition characterized by an exaggeration of the nervous phenomena of health or disease, whether these be exhibited in the mental condition of the patient, his sensations, or movements. Timidity, inequality of temper, a disposition to sudden manifestations of grief or joy—often on the most trivial grounds,—an agitated manner, temporary illusions of the special senses, spinal irritation, shifting pains and tenderness in various parts of the body, excessive excito-motory phenomena palpitation, hysterical globus, hydruria, &c., are amongst the most prominent indications of the hysterical constitution; and it is by the presence of a greater or less number of these that we recognize the affection, not only when it occurs in the female, but also when we meet with it in the male. By comparing the above case with this hasty and imperfect outline we shall readily recognize its principal features. The cause of the disease was, as usual in males, the combination of unpleasant and painful emotions and mental anxiety, with debility, resulting in this instance from close confinement to business and imperfect nourishment. Specific gravity 1002, is the lowest density of urine in which I have noticed the presence of oxalate of lime. The octohedra disappeared as the patient's strength was restored by a proper diet, and as the nervous excitement under which he laboured was abated by the use of opium, and the removal of irritating causes.

Case V.—Hysteria.

T. V———, aged 55 years, residing in a healthy part of the city, of a cheerful disposition when in health, married, and of temperate habits, applied at the dispensary on the 22nd of September, 1846, in consequence of having become "extremely nervous," timid, and low-spirited. When young he served on board one of the East India Company's ships, and when he left the sea he was engaged to copy law deeds. Four years ago he had a fit, during which he entirely lost his consciousness for half an hour, and it was preceded by a sense of lowness and giddiness. Ever since that time he has become weaker, and has fretted a great deal on account of inability to obtain employment. A twelvemonth ago he lost one of his sons suddenly, which made a great impression on his mind, and during the last few weeks has felt still more annoyed by one of his daughters entering a convent contrary to his wishes. Very shortly after this last occurrence, nearly six weeks ago, he began to lose his appetite, and to become much more nervous than ever he was before, becoming startled at the slightest noise, if sudden, and at such times suffering from palpitation. At the same time, he began to feel very languid, and low-spirited, and is now frequently disposed to shed tears, an inclination which, though he rarely gives way to it, yet he finds daily growing upon him. He is most low-spirited in the mornings, and sometimes is as cheerful as usual for the space of an hour or two; he has distinctly lost flesh during the last six weeks; he complains of pain, of a shooting character, in the temples, especially in the left, where it is accompanied by tenderness; his sight is dim, and frequently he has a sense of stars floating

before his eyes; sleeps badly; his whole manner is quick and agitated; the hands tremble much, and the lips and chin quiver as he speaks; suffers from flatulence and borborygmi; complains especially of a fluttering pain at a spot of the epigastrium, which he can cover with his finger, especially severe on any exertion, but relieved by flatulent eructations; has occasional darting pains under the left breast; there is tenderness at epigastrium, but none over the spine; bowels regular, but the stools are scanty; tongue tremulous; pulse 80; urine excessive in quantity, acid, of specific gravity 1024, throws down a slight cloud-like deposit, containing some crystals of uric acid, but no octohedra or other forms of oxalate of lime. Ordered—R. Calomelanos, gr. v.; Pulv. Zingib., gr. ij.; Pulv. Jalapæ, gr. xv. Ft. Pulv. statim sumend. et cras mane repetend.

25th. Has lost his headache, but otherwise is much the same; urine, five pints in the last twenty-four hours, very pale, of specific gravity 1016, presents a slight cloud-like deposit, along with some red sand; no oxalates in the deposit. R. Olei Crotonis, gtt. ij.; Micæ Panis. q. s. pro pil. vj. Capt. j. omni nocte.

29th. Pills act too powerfully; previously to yesterday the fluttering at the epigastrium had lessened, and he had felt much more cheerful, but all the forenoon of that day was unusually low-spirited, and the palpitation, with fluttering at the epigastrium, was troublesome; he knows no cause for this sudden change; his manner is more collected; nothing morbid discoverable on physical examination of the chest; first sound of heart rather tripping in character; urine still contains a little red sand, of specific gravity 1022. Contin. pil. cum Ol. Crotonis, gtt. j., tantum.

October 2nd. Still very nervous and variable as regards his spirits; has lost the shooting pain in the left side; complains of strange sensations at the epigastrium; bowels regular; urine of last twenty-four hours four pints, pale, and containing a few crystals of uric acid, of specific gravity 1016. Contin. pil. R. Bebeerinæ Sulph., gr. v; Extr. Gent. q. s. pro pil. ter die sumend.

6th. Feels very much better; has no headache or appearance of stars before his eyes; complains of little more than flatulence and lowness of spirits; takes his pills only every other night, and the bowels are regular; urine of last twenty-four hours five pints, of specific gravity 1014; no saline deposit.

9th. Believes he is gaining strength; is less nervous; is in better spirits; and his appetite, which has been rather capricious, is now much improved; urine pale, cloudy, depositing a slight cloud at the bottom, which contained a large number of circular thin plates, of all sizes, some very minute, and more or less distinctly marked with concentric lines; re-action moderately acid; specific gravity 1015.

13th. Has not suffered from lowness of spirits since last visit, and is far less nervous; is distinctly gaining strength, and sleeps better; there is very slight fluttering, and tenderness remaining now at epigastrium; urine pale, of specific gravity 1017, moderately acid, and presents no saline deposit.

23rd. Since last visit has been residing at Putney; states that he is now nearly as strong as when in his usual health; has not felt low-spirited, and is far less easily startled; some epigastric fluttering and tenderness still remaining; urine presents no saline deposit.

November 9th. Has continued improving in every respect up to this time, and now considers himself perfectly recovered. Discharged.

Remarks.—The hysterical character of this case was manifested in the irregular cheerfulness and sudden alteration to depression of spirits under which the patient laboured; by a timidity, not only uncommon in his sex, but quite unusual in himself; by the agitation of his manner, the nervous character of his pains, and the abundant limpid urine which he passed. I have only further to observe, that this is the only case in which I have noticed the occurrence of the circular form of oxalate of lime without the appearance of octohedra in some part of its course. It appears to me to indicate a very slight disposition to the formation of oxalic acid in the system. I may direct attention again to this illustration of the value of the sulphate of bebeerine as a tonic.

(*To be continued.*)

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, JULY 28, 1847.

In the discussions which have taken place on various occasions in reference to the remuneration of medical men for their professional services, there is one point which, as it appears to us, has not been sufficiently attended to. We allude to the bearings of the question on medical ethics. To encourage a high tone of professional feeling, such as has indeed ever characterized the true physician in his intercourse with those who are unable to make any adequate return, is one of the most important objects of the medical moralist. For numerous admirable examples of this feeling, it is only necessary to refer to the recorded actions of the eminent physicians and surgeons of past ages, as pourtrayed in any medico-biographical work. The short sketch of the lives of twelve of these worthies, lately given to the world in the translation of the Akesius of Professor Marx by one of our associates, affords very many instances, and the well-known sentiment of Boerhaave, that the poor are our best patients, for God is their paymaster, was clearly a ruling principle with many of those whose honoured names are continually before us, and whose example in their relations towards the suffering poor, will, we trust, ever be cherished and followed.

But it is precisely that this feeling may be kept up that we are desirous of seeing a better system prevail than is now so generally acted on. If the medical practitioner owes a duty to

his fellow man, and with chivalrous and devoted energy, regardless of danger, is ever found ready to discharge it, surely there is some consideration due to him in return. If he be found ready and willing at all times to respond to the call of distress, and to administer his professional assistance to those who stand in need of it, it is in like manner for the advantage of the community that any public services rendered by him should be liberally and cheerfully rewarded. The efforts which are made by the profession, through the many local relief societies,—through the Benevolent Fund of this Association,—and more recently through the General Medical Annuity Fund, to aid and support the families of those who have spent a life, possibly a long one too, of active exertion, in attendance on the sick, without deriving a sufficient income from which to make provision for the future, shews the necessity which exists that an adequate return be made for services so bestowed.

In order that the medical man should be benevolent and charitable in the exercise of his professional calling, the public should be just; and to require of him to give his time, his talents, and his days and nights of labour in the public service, for a salary barely sufficient for the expense of the medicines and appliances which he is also called upon to supply, is to cripple his best efforts in the cause of humanity, to engender feelings most inimical to the exercise of those principles by which it is the glory of the genuine physician to be influenced, and to convert the high-minded member of a liberal profession into the slave of men, the sum of whose existence is made up of miserable calculations of how much can be extracted from the best feelings of others, at the smallest possible expense to themselves.

This injurious system of throwing the entire charge of the sick poor upon the members of a profession, whose gratuitous services are and have ever been at the call of humanity, is a crying public evil which it is the real interest of the public speedily to get rid of; and we rejoice to see that medical men are at last beginning to arouse themselves to the endeavour to remedy this evil. The memorial of the Irish physicians and surgeons is already before our readers. A meeting of the medical officers of the Halifax Union has lately been held, at which a series of resolutions, inserted in another column, was adopted, and presented to the Halifax Board of Guardians. Another meeting of medical officers of Poor-Law Unions is to take place this day at Matlock Bath; and the example will, we trust, be generally followed.

The manner in which former applications to the Poor-Law authorities have been met, is well known. Neglect and contumely, a mere official acknowledgement of the receipt of the communication, or a refusal to attend to it, conveyed in the cool language of some official underling, are all that have hitherto been gained by such applications. Is the practice now improved? Let our readers turn to the reply (published in another column,) of Her Majesty's representative, the Lord Lieutenant of Ireland, to the memorial signed by one thousand physicians and surgeons. It is needless to say what the effect of the reference to the Lords of the Treasury therein spoken of will be when we learn that a letter has already been addressed to the Lord Lieutenant, from the Treasury, (by Mr. Trevelyan,) in which the offer is made to send over as many army and navy surgeons as would be required, if the Irish medical men refused the terms of the Government for attendance on the fever hospitals!

The Halifax District contains a population of 19,881, in an area of 990 acres; the medical officer receives 4s. 4½d. per day for attendance and medicine. This is equivalent to 3⅜d. for each visit paid, the medicines being included! On the receipt of the representation of the medical officers of the Halifax Union, in which the extent of the services performed, and the inadequacy of the remuneration were temperately pointed out, one of the Guardians actually proposed to treat the representation with "silent contempt." A similar insult was offered at the Cambridge Board some time ago, when on an application for an increase of salary to the officers of the districts, two of the Guardians proposed that the increase should be "one farthing." It is true that in these instances the insult did not pass unrebuked; the Cambridge Guardians have increased the salaries of their medical officers, though to a very inadequate amount; and the Halifax Guardians have agreed to take the resolutions into consideration. But the very circumstance of such low-minded individuals as those referred to, being permitted to exercise a voice in the question of remuneration for the services of gentlemen of education and intelligence, shews that it is absolutely necessary for the profession to combine together and themselves settle the minimum amount of remuneration which alone should be accepted.

It would be far better that the duties should be performed altogether gratuitously, and the proper acknowledgment made that it is so, than that, with such an altogether insignificant and insufficient amount of salary, the members of the profession should burden themselves with the expense of medicines, &c., and submit to the thraldom and insults of Poor-Law and Government authorities.

Proceedings of Societies.

SOUTH-EASTERN BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ANNUAL MEETING.

(*Continued from page* 383.)

The following paper was read by Mr. Martin, of Reigate:—

MEDICAL APPRENTICESHIP.

A paragraph has recently gone the round of the newspapers to the effect, that Miss Burdett Coutts had given a hundred pounds, and the Bishop of St. David's fifty pounds, to some fund established at Birmingham, to be available in relieving youth to be educated to the medical profession from the degrading influences affecting their apprenticeship.

It has been of late years a sort of fashion to abuse medical apprenticeship, as if it were an unquestioned, and unquestionable fact, that the course of tuition under that form of obligation was humiliating and degrading to the pupil,—a servile occupation, teaching nothing but the mere mechanical composition of drugs at the counter,—a waste therefore of valuable time, and a form of discipline to be repudiated and cast off as soon as possible.

Were this the absolute fact, a vindication of apprenticeship would be a vain attempt; but the only real objection which can be suggested is the length of its duration. The ancient period of seven years has been given up long ago. The period of five years, established by the act of 1815, is, unless under special circumstances, longer than is absolutely necessary; but a servitude for the full period is now very seldom insisted on, the last two years being relinquished to be devoted to the attendance on lectures and hospital studies by a judicious and previously understood arrangement.

As the result of experience and mature reflection on this subject, I am decidedly of opinion, that a youth destined for the medical profession as a general practitioner, after an adequate preliminary education, of a liberal and comprehensive character, cannot commence his professional education better than by being employed for three years in acquiring a knowledge of the various articles of the Materia Medica—their peculiar characteristics—their sensible and medicinal properties—their preparation and composition in all the various forms in which they are dispensed and administered in the cure of disease; thereby improving the education of the senses, acquiring a readiness and a quickness of manipulation, an accuracy and perfection in the combination and preparation of medicines. In vain are the best and wisest prescriptions devised, unless they are prepared with correctness, and with medicines of the best and finest quality. It is well known that the sophistication and adulteration of articles of the Materia Medica are carried on to a great extent, and it is of the greatest importance to be enabled to distinguish between good and bad medicines. And here it may fairly be asked, of what importance is the cost or price of articles of the Materia Medica, when compared with the risk of the inefficiency or failure of inferior medicines, in the treatment of either acute or chronic disease, more especially in cases where the life of the patient may depend on the speedy effect of medicinal means? And what medical practitioner can have a moment's peace of mind if he has doubts as to the purity and efficacy of the medicines he prescribes?

To the art of the neat and correct preparation of medicine might be added, to a certain extent, the use of the still, the retort, and the crucible, in the home laboratory, as being immediately beneficial to the pupil, in assisting his knowledge of pharmaceutical chemistry, promoting his familiarity with the processes of chemical science when he proceeds to the great schools of the metropolis. The manufacturing chemists of the present day are in the habit of supplying so many forms of medicine ready prepared, which facilitate the dispensing department to such an extent that the apprentice is spared the performance of many operations which were formerly done at home. This, however, is in some respects a disadvantage, so far as that the amount of labour and variety of manipulation are too much diminished.

To this knowledge of the Materia Medica, and of pharmacy, is added a knowledge of therapeutics, so far as it may be furnished to the pupil in private practice by the observation of cases of disease and their treatment. Surgical, as well as medical, cases, come under his observation, and he becomes familiar with the minor operations of surgery. Osteology is one of those subjects which may be mastered during an apprenticeship.

With respect to reading, a judiciously selected series of medical authors will be a necessary part of the course of instruction; not the mere manuals and class books, as being the short cuts to knowledge, but the works of the authors of the highest repute in medicine. These, if written in the Latin or French language, should be read, if possible, in the originals, and not in translations; and no youth should be received as an apprentice who is unable to read such works with facility. A knowledge of these languages implies the other branches of a liberal education; and no young person should be educated to the medical profession who has not had the advantage of good scholastic discipline, and has acquired a fair amount of science and literature, general and classical.

If the apprenticeship should be carried out in London, or a large provincial town, various accessaries in the attainment of knowledge will be available. If in the country, the study of botany and of other branches of natural history may be cultivated with success.

If it should be alleged that the pupil will scarcely find time for these different objects of pursuit, it may be answered, that nothing can be done without industry; and much may be accomplished by the habit of early rising. The time won in the morning will be found of the greatest importance, and as a habit to be acquired, if not already possessed.

Among the habits to be avoided is that of tobacco-smoking; odious and vulgar as it is whoever may be

addicted to it, it is peculiarly objectionable in youth in course of education for the medical profession—offensive as it necessarily must be to patients who are cognizant of it, either by sight or smell. Independent of its pernicious effects also,* it marks an inferiority of mind, and a disposition to other idle and lounging habits—habits injurious in a high degree, if not fatal, to mental progress and to the acquisition of knowledge.

At an age of some importance to moral purity, the pupil, in the decorums and proprieties of a private family, continues to be a youth of unexceptionable conduct; with sound principles and a well-regulated mind, he becomes fully prepared for the great schools of the Metropolis. By a judicious and harmonious combination of various employments, and an industrious pursuit of them during a three years' apprenticeship, a variety of knowledge and habits of conduct, invaluable in after life, are firmly established.

Throughout his professional career, the practitioner will reflect, with an assured conviction, that the wholesome discipline of his apprenticeship was of inestimable value to him, in many respects; and he enjoys the comfort and satisfaction to feel assured that the medicines he has prescribed may be depended upon for their genuineness and their efficacy, whether prepared by his own hand, or by those of other trustworthy persons in his establishment. He will have none of the spurious and absurd pride of supposing that his apprenticeship has been in anywise humiliating to him; but that the manual labour, with the love acquired for professional and intellectual pursuits, with medical literature, had a decided and favourable influence, in increased power and vigour of thought, and of action. The apprenticeship being concluded, the student is well disposed and well qualified to pursue with due effect his hospital studies, and to acquire the theoretical and practical knowledge of the great schools. His reward—the pure and elevated pleasures attending the acquisition of that knowledge, and its application to a successful practice. And although, having to get a living by his profession, not able to accomplish so profound and comprehensive an education as might be wished, and such as has been for example shadowed forth in the Hunterian Orations for 1840 and 1847, yet his superiority is felt and acknowledged in society, as an example of unexceptionable morals, easy, unaffected, gentlemanly manners, and as an able and skilful practitioner.

In offering these few observations to you, Mr. President and gentlemen, on a subject on which, in my humble opinion, there prevails an erroneous impression, I am desirous of vindicating, however feebly, the *dignity of labour*; of asserting that the education of the senses, and the education of the hands and fingers, as well as of the head, is perfectly consistent with the highest refinement of mind and manners, and the most gentlemanly conduct. Such has been, in fact, the course of early discipline through which have passed some of the most eminent men who have dignified and adorned our profession.

Dr. Powell read a paper on the form of functional derangement of the liver, arising from increased and deranged secretion, with a view to determine its more frequent causes, their mode of action, and principles of treatment.

[This paper will be published in a future number of the Journal.]

Mention was made by Mr. Hextall Smith, that Mr. Ferrand had stated in the House of Commons, that some individual, employed as the medical attendant of the paupers of a Poor-law Union, had informed him (Mr. Ferrand,) that his remuneration was on so low a scale, that he felt obliged to, and did withhold, the necessary medicines for the cure of the sick-poor to a great extent, on account of the expense.

Mr. Hextall Smith thereupon moved, and Mr. Hunt seconded, a proposition, which was unanimously adopted—

"That one of the county members of West Kent be respectfully requested to ask Mr. Ferrand in his place in the House of Commons, who was the individual who so informed him; also, that the members present at this meeting repudiate and reject with indignation so unworthy a motive of conduct."

ARSENIC IN CANCEROUS DISEASES.

Mr. Hunt, of Herne Bay, requested to call the attention of the meeting to the control which the internal exhibition of arsenic appeared to exercise over cancerous diseases. He had seen some well-marked cases recover under this treatment, and believed that the medicine, if systematically administered, would check the disease in every stage. He requested that the members present, most of whom probably had hopeless cases of cancer under their charge, would try the remedy, and report the results at future meetings. The form used by Mr. Hunt was the Liquor Potassæ Arsenitis of the Pharmacopœia, of which the dose was five minims thrice a day, on a full stomach,—the dose to be reduced on the supervention of conjunctivitis.

ON THE PROPERTIES OF THE IBERIS AMARA.

A paper was read by Dr. Silvester on the virtues and properties of the Iberis Amara, or Candytuft, a remedy brought to light by the late Dr. Williams during a course of therapeutical researches at St. Thomas's Hospital. Many striking and remarkable cases were related in proof of its salutary power over asthma, bronchitis, dropsy, and more especially cardiac hypertrophy. It seems that it does not diminish the velocity of the heart's action like digitalis, but that it possesses the property of controlling the violence and sharp action of the organ, and softening the pulse; hence its great value in hypertrophy with dropsy.

Dr. Silvester had prescribed it for ten years in numerous instances of the above-mentioned diseases, always with some benefit, and sometimes with almost magical efficiency. It ought not, as the author of the paper well observed, to be administered rashly, as is too often the case with new remedies; for then, from its frequent failure, it would be, as it had been before, as rashly laid aside. A careful adaptation of the remedy to the disease, or its symptoms, was essential to its success; no ill effects followed its use; it occasionally

* See Prout on Stomach Diseases, p. 24, ed. 3.

induced giddiness, sickness, or diarrhœa, but these subsided on discontinuing the medicine. Its curative power was not dependent on such occasional consequences of its administration, inasmuch as its control over the abnormal action of the heart was equally evident whether these effects were absent or present; its influence being like digitalis, belladonna, and some other natural agents, of a purely specific character. The dose prescribed was from one to three grains, generally mixed with cream of tartar, which concealed the nauseousness of the taste, and secured a perfect trituration and division of the tough seed.

The leaves, stem, and root, possess similar properties; but from convenience, and from their greater relative strength, the seeds were the parts of the plant chiefly employed. Iberis is a family of plants belonging to the order Cruciferæ. The Iberis in question is the I. amara, *Linn.*, found plentifully in every garden, and cultivated for its brilliant milk-white flowers. It appears from the researches of the author, that this valuable plant was not only known to Pliny, and is mentioned by him in his Natural History, as a remedy for gout, but that it was accurately described by Aetius, Paulus Ægineta, and Oribasius, and lauded by these venerable fathers of medicine as an excellent external and internal medicament in various diseases. It passed under the several names of Iberis, Cardamine, Lepidium vel Lepidum. Aetius has a long chapter headed "De Iberide sive Cardamine quæ et Lepidium vocatur." He remarks that Galen had written fully on its application in rheumatic affections of the hip-joint; and that Archigenes had prescribed it "in splenicis et coxendicibus;" and in an epistle to Aristo, which is quoted, had entered copiously into the subject of its botanical character, observing that its flowers were milk-white.

The Nasturtium, a plant akin to the Cardamine, is spoken of as a valuable addition to those medicines which relieve difficulty of breathing, and which dry up thick humours. Paulus Ægineta describes the Iberis et sylvestre Nasturtium as identical, and speaks of their value "non solum coxendicum sed etiam aliis diuturnis morbis." Oribasius employs similar terms of eulogy in his description of the plant in question, so that no doubt can exist of its high estimation amongst the Greek practitioners. There is an incidental proof in Lindley's "Introduction to the Natural System," of the correctness of the belief that the order Cruciferæ contains many plants of value in the treatment of asthma and dropsy. It is there said that Prince Maximilian of Wied Neuwied, relates of the Brazilian Indians, that they used a kind of cress, resembling that of Europe, as a good remedy for asthma. The Iberis amara is a true cress.

EPIDEMIC SCURVY.

Dr. Sibbald stated that he was not prepared with any written statement upon a subject which he felt disposed to regard with much interest—namely, the appearance of true scurvy, in various parts of the country, within the last six or eight months. As it was of consequence that the statistics of such an epidemic should be thoroughly known, he hoped soon to be enabled, through the pages of our Journal, to state what had fallen under his observation more fully than he could do at present. His principal object in now bringing the subject forward was, to enquire of those present if any cases of this disease had come under their notice. His own experience was confined to what he had met with in the Kent County Lunatic Asylum, where seventeen well-marked cases occurred, besides numerous others in the incipient stage of the disease. The former were characterized by a pallid complexion, swelling, pain and stiffness of the joints, particularly of the knees and ankles, œdematous swellings of the lower extremities, the skin generally of a blueish yellow colour; petechiæ were present in most of these; in others, large blotches of ecchymosis; in all, the gums were swollen; in some of a spongy, in others of a hard and cartilaginous, texture, overlapping the teeth.

In answer to a question respecting the diet of the patients, Dr. Sibbald said that the usual diet was one which, in his opinion, constituted all that was requisite for the due preservation of health; but that since the month of October there had been a great want of the usual supply of vegetable food. No potatoes had entered into the diet of the patients since the commencement of November; and the supply of other vegetables had been extremely scanty. The cold and inclement weather we had experienced during the winter and spring months had confined the patients much within doors; so that they had not had the benefit of out-of-door exercise in the airing grounds of the establishment. He was, however, happy to say, that the liberality of the visiting Magistrates had given him a *carte blanche* to order such an alteration of diet as he might think proper. Potatoes were therefore procured, although at an exhorbitant price, and a liberal allowance of turnip tops, so soon as they became available, were supplied, not only to the patients affected with the disease, but to the whole of the inmates of the establishment, amounting to upwards of 350 on an average. Those affected speedily recovered without any particular medical treatment, and no fresh instance of the disease occurred amongst the other patients.

Mr. Battley, and his nephew Mr. Samuel Battley, at the request of the Committee, exhibited specimens of their excellent medicines, very much to the gratification of the gentlemen present; and a vote of thanks was adopted to Messrs. Battley, for their kindness, and the trouble they had taken on the occasion.

At five o'clock the gentlemen present adjourned to dinner at the White Hart Hotel.

GENERAL MEDICAL ANNUITY FUND.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOUNAL.

SIR,

I enclose for insertion in your valuable Journal the following abstract of the proceedings of this Society. It is highly gratifying to Mr. Daniell, and I am sure it must be equally satisfactory to the profession generally, to find the determined zeal which is evinced by the supporters of this Fund to carry it out in its simple

integrity, as a measure calculated to meet those contingencies which, although common to every class of profession or business, are peculiarly so to the medical practitioner. There can be no doubt that a very few years of active co-operation will place this Fund in the position of an enrolled society, and as its operations will extend throughout the whole of Great Britain, it may become a great national institution, calculated at once to meet those acknowledged wants felt so extensively by the widows and orphans of medical men. As already upwards of forty gentlemen have voluntarily promised active co-operation as honorary local secretaries, I hope I may be pardoned in urging this part of our plan peculiarly upon the profession, and if there be any gentlemen still willing to join in these duties, that they will honour me with a communication, and I assure them it will be my pleasure, as well as duty, to furnish them with every information they may require.

I have the honour to remain, Sir,

Your obedient servant,

JOSEPH STAINES, Secretary.

Savings' Bank, Newport Pagnell, July 10, 1847.

At a meeting of the Acting Committee of this Fund, held on Tuesday, the 16th of July, at Edward Daniell's, Esq., Newport Pagnell.—Present, John Rogers, Esq., Newport Pagnell, (in the chair;) Edward Daniell, Esq., Newport Pagnell; Dr. Barker, Bedford; G. Harvey Betts, Esq., Watford; H. L. Smith, Esq., Southam; Dr. Pritchard, Northampton; Thomas Parker, Esq., Woburn; George Kelson, Esq., Sevenoaks. The Chairman having read the resolution passed at the General Meeting of the Society, held at Northampton, on the first of June last, appointing the Committee, the Secretary laid before the meeting a list of the members of the Institution, with the amount of their donations and subscriptions to the 30th of June last, being the close of the second year, together with a general statement of the funds up to that time, when the same having been examined, was approved and ordered to be entered on the minutes.

Resolved,—"That the Treasurer be requested to invest two hundred pounds in the names of the trustees of this Society."

The Secretary also laid before the meeting a draft of the amended rules and regulations for the management of the Society, and the same having been deliberately considered and discussed, it was resolved—"That the rules and regulations of the Society, as now signed by the Chairman, be the rules and regulations of this Society, and that 500 copies of the same be printed for distribution amongst the subscribers and friends of this Institution."

The Secretary laid before the meeting a draft of a prospectus of the Society. Ordered that 1500 copies of the same be printed for general circulation.

The Secretary also laid before the meeting a list of gentlemen who had offered their services as honorary local secretaries. Resolved—"That the offer of the services of these gentlemen be most gratefully accepted, and that the Secretary do write to each gentleman a letter explanatory of their duties, and forward to them the rules and prospectus of the Society."

The Secretary, having read a letter from the Editor of the "London and Provincial Medical Directory," resolved,—"That an advertisement be inserted in the circular about to be issued by the publisher of the "London and Provincial Medical Directory;" and that an advertisement be also inserted in that work for the year ensuing; and that the thanks of the meeting be given to the Editor for his liberal annual subscription of three guineas.

(Signed,) JOHN ROGERS, Chairman.

REMUNERATION OF MEDICAL OFFICERS OF UNIONS.

HALIFAX UNION.

On Tuesday, July 6th, a meeting of the medical officers of the several districts of the Halifax Poor-Law Union was held at the house of Thomas Harrison, Esq., and was attended by the following gentlemen:—Mr. Brook, Stainland; Mr. Aked, Luddenden; Mr. Atkinson, Ovenden; Messrs. Robertshaw and Elliott, Sowerby Bridge; Mr. Robinson, Ripponden; Messrs. F. S. Garlick and Harrison, Halifax.

The following resolutions were proposed, seconded, and carried unanimously:—

Moved by Mr. F. S. Garlick, seconded by Mr. Harrison,

1. That in the opinion of this meeting, the administration of medical relief to the poor is of vast importance; moreover, it demands not only skill, but an amount of patience and forbearance, as well as a defiance of fatigue and personal danger, such as can alone be found as traits in the character of a conscientious medical practitioner.

Moved by Mr. Harrison, seconded by Mr. Elliott,

2. That the medical attendant on the poor is necessarily brought into daily contact with diseases of the greatest virulence,—that he is compelled to treat them under the most depressing circumstances,—that he often falls a victim in the faithful discharge of his duty,—and, therefore, he needs the encouragement and support of every well-principled mind. That he has constantly to visit the abodes where poverty and squalor reign triumphant, and on him devolves the arduous and perilous duty of attempting, at all risks, to control the dissemination of contagious diseases of every type.

Moved by Mr. Robinson, seconded by Mr. Robertshaw,

3. That in the opinion of this meeting the public services of medical men are neither properly understood nor duly appreciated, and the award made to them is on a scale wholly incommensurate with the amount and importance of the duties they have to perform. That the stipend they receive does not place them on an equality with an Inspector of Police, notwithstanding which, they are compelled not only to furnish medical advice and attendance, but to supply all necessary appliances and medicines. That the smallness of the stipends now awarded makes it clear that the medical relief of the poor falls, not on the Board of Guardians,

but, very unjustly, on the hard-worked medical officers.

Moved by Mr. Elliot, seconded by Mr. Aked,

4. That as one-half of the salaries of medical officers is now provided out of the Consolidated Fund, purposely that means may be available for affording more adequate remuneration, Boards of Guardians can have no excuse for withholding that just and liberal allowance which is pre-eminently due; but on the contrary, have, from this arrangement, a strong inducement to render the profession a worthy, and not unmerited, service.

Moved by Mr. Robertshaw, seconded by Mr. Robinson,

5. That it is the opinion of this meeting, that, although medical officers do not expect to be remunerated in a manner equivalent to their actual services, or in accordance with the charges they make to the poorest of private patients, their present salaries are so extremely inadequate, that they are justified in urging on the Board of Guardians a large addition, or a fixed sum of 7s. 6d. per case—renewable, in long-continued ailments, every three months.

Moved by Mr. Aked, seconded by Mr. Atkinson,

6. That this meeting pledges itself to uphold, by every means in its power, the honour and dignity of the profession, and on all occasions to advance its best interests, and promote the welfare of every member, thus hoping to secure the approval and support of their brethren at large.

Moved by Mr. Atkinson, seconded by Mr. Robertshaw,

7. That the foregoing resolutions be respectfully submitted to the Board of Guardians at an early meeting, with a fervent hope that they will be pleased to grant them a patient consideration, and that they may be induced to set an example of duly appreciating the public services of their medical officers, whose lives are hourly jeopardized in the prosecution of their duty.

Halifax, July 6, 1847.

MEMORIAL OF THE PHYSICIANS AND SURGEONS OF IRELAND: REPLY OF THE LORD LIEUTENANT.

Dublin Castle, July 14, 1847.

Sir,

I am directed by the Lord Lieutenant to inform you, that with reference to your letter of the 9th instant, by the Act 10th Vic., c. 22, the salaries of the medical officers appointed under the 9th Vic., c. 6, are subject to such regulations as may be made by the Lords Commissioners of Her Majesty's Treasury, to whom therefore His Excellency has forwarded the memorial to which you refer.

I am, Sir,

Your obedient humble servant,

J. W. REDINGTON.

To R. Wilde, Esq.,
15, Westland Row.

General Retrospect.

PHYSIOLOGY.

ARE THE MOVEMENTS OF THE HEART INFLUENCED BY THE BRAIN AND SPINAL MARROW?

In the first part of an essay upon this subject, Dr. Julius Budge reviews the principal theories of the movements of the heart, from the earliest antiquity. These movements have been attributed—

1. To the innate temperature of the blood. (Hippocrates, Sylvius, &c.)

2. To the muscular irritability of the heart. (Galen, Haller, Winter, &c.)

3. To the influence of the cerebellum. (Willis.)

4. To the spinal marrow, (Legallois;) the medulla oblongata, (Budge;) the sympathetic ganglia. (Lancisi, Volkmann, and others.)

In the second part, this celebrated physiologist gives a detailed account of the nerves of the frog's heart. In the third he analyses the influence of the brain and spinal marrow upon the voluntary muscles; the action of air and blood upon the heart; and, lastly, the influence of the brain and spinal marrow upon that organ. The memoir ends with the following results:—

1. The spinal marrow is the central organ for the heart's movements, inasmuch as it maintains the irritability of the voluntary muscles.

2. The medulla oblongata is the central organ for the reflex movements of the heart.

3. The ganglionic system is not the central system for the heart's movements, but appears to modify the influence of the voluntary and reflex principles.—*Archiv für Physiologische Heilkunde.*

EXPERIMENTS WITH ÆTHER.

By Dr. Nelson, of Montreal.

[We extract the subjoined account of some experiments with æther, for the sole reason of expressing our intense disgust at the more than Red Indian brutality which could have devised them. They would have been unwarrantable under any circumstances; but after the knowledge of the effects of the agent which has been afforded by surgical operations, they demand an execration for which we have not sufficiently strong expressions. Compared with these *physiological* experiments, Magendie's vivisections were mercy. Conceive the poor animal deprived of its skin, its quivering flesh smoking from the iron, its thorax laid open, endeavouring to lick its wounds!! The man who could perpetrate such useless and unheard-of cruelty, deserves a similar treatment. Let every true physiologist cry shame.]

"A few days after, I instituted another series of experiments, when I carried my operations to a still greater extent, to prove conclusively, if full confidence could be placed on the effects of the inhalation. The dog was once more the subject. In three minutes and a half, he was under the full influence of the æther. The skin being removed from the whole of the body, I passed over the quivering flesh a poker heated to whiteness. Several deep incisions were made in the muscles of the back, the right leg was entirely separated

from the body, excepting the vessels and nerves, and I once more applied the poker to staunch the bleeding of several small arteries; not a moan was heard, not the least starting of a nerve was perceptible; the flesh smoked and the iron hissed. By means of a crucial incision, I laid open the abdominal cavity, and took out upon the table the mass of intestines; my students had then the advantage of a demonstration of the peristaltic motion of those organs, and could observe the rising and falling of the diaphragm, assisting most powerfully the respiratory act. The intestines were cut through in different places, the liver and spleen torn and wounded, every step followed by the application of the heated poker. Finally, the thorax was laid open, several of the ribs forcibly fractured, and the intercostal muscles lacerated.

"The time occupied in performing this long and severe series of experiments, was nearly three quarters of an hour, during which the breathing tube was applied to the dog's mouth once every eight or ten minutes, on an average. By the aid of a little ice-cold water poured down his throat, in a few minutes he perfectly recovered, turned on his side, and endeavoured to lick his numerous wounds, and tried to rise, but was so much exhausted by the profuse loss of blood, that he fell back on the table. When the gentlemen present were perfectly satisfied with the happy results of these cruel and lengthy experiments, the dog was strangled.—*British American Journal*, June.

PATHOLOGY.

ON THE BLOOD AND URINE OF THE INSANE.

Respecting the blood, Dr. Erlenmeyer determines as follows:—

1. That tuberculization is the only form of hyperinosis observed in the insane; that it is to be regarded as a predisposing cause of mental alienation; and that hypostatic pneumonia is a frequent occurrence in these patients.

2. That typhus, cancer, and the exanthemata are rare in the insane, but more frequent in idiots.

3. That diseases of the heart are not uncommon in insane patients, especially in the melancholic.

4. The serous dyscrasia is common in the insane.

5. Scorbutus, dysentery, and other diseases of hypinosis are common.

6. Melitæmia (diabetes,) is rare.

7. Syphilis is a frequent cause of madness, but we are ignorant of its effects upon the blood.—*Archiv für Physiologische Heilkunde.*

With regard to the urine, he observes that it may occur under two opposite conditions. It may be pale, and of low specific gravity; this is chiefly seen in melancholic patients, and in maniacs: or it may be high coloured, rich in solid constituents, of high specific gravity; this is chiefly seen in idiots and epileptics. The first variety of urine readily becomes alkaline from decomposition of urea; this is a bad prognostic sign. In the second variety, the tendency to alkalinity is not observed; on the contrary, it often retains its acidity beyond the ordinary time of health. In the first kind phosphatic deposits predominate; in the latter the lithates. Albumen, sugar, &c., are rarely seen.—*Œst. Med. Wochenschrift*, 1846.

OSSEOUS TRANSFORMATION OF MUSCLES.

Mr. Wilkinson has reported to the Manchester Pathological Society a case, in which, in addition to certain deformities of the skeleton, numerous ossific plates were found in the muscles of the chest, particularly the pectorales, the latissimus dorsi, and erectores spinæ, as well as irregular shaped ossific bands in other muscles, which were disposed as follows:—One about ten inches and a half long, and varying from 8-10ths to two inches in breadth, and from one to four lines thick, was attached by tendinous fibres to the crest of the left ilium, about an inch and a half from the posterior superior spinous process, and after running up along side of the spine was connected to the spinous processes of the dorsa vertebræ from the seventh to the second bone. From this, other bands extended through the left rhomboid muscles, and became attached to the base of the corresponding scapula, and penetrated the infra-spinatus muscle. On the right side of the spine a long process of bone ran nearly parallel to the former, extending over the dorsum of the ribs, and ending in an irregular plane of osseous matter attached to the sacrum. The pectoral muscles on both sides also contained bands of bone attached to the sternum, clavicle, and upper ribs. The right sterno-cleido-mastoideus was almost entirely replaced by ossific matter, its two extremeties only being tendinous. The depressors of the lower jaw also contained patches of bone. The patient was a female, aged 21 years.—*Medical Gazette.*

PRACTICAL MEDICINE.

TREATMENT OF DROPSY AFTER SCARLET FEVER.

Dr. Golding Bird remarks, that as a prophylactic remedy the warm bath is invaluable, he scarcely recollects a case of dropsy after scarlet fever occurring, when the warm bath was daily used as soon as the skin began to exfoliate, and continued until a healthy perspiring surface was obtained. When anasarca has occurred, strict confinement to bed, or at least to a warm room, must be enjoined, the warm bath used twice a week, and free action of the skin encouraged. The bowels should be kept active by the Pulvis Jalapæ Compositus, and the Antimonii Potassio-Tartras administered in doses of one-twelfth to one-eighth of a grain four or five times a day, according to the patient's age. This plan must be followed till the anasarca has vanished and the urine is free from albumen, after which a more generous diet may be allowed, and the ammonio-citrate of iron administered to remove the anæmiated condition of the patient. Dr. Bird states that this treatment has been almost invariably successful.

BENZOATE OF AMMONIA IN GOUT.

Dr. Seymour states that he has frequently used this medicine in cases in which the small joints were red and swollen, or where fluid was deposited in the joint of the great toe, and also in cases where the lithate of soda existed in the joints of the fingers, and that it was decidedly useful. He thinks that early depositions have been arrested, and large depositions diminished, under the use of this medicine. He regards it as a

good diuretic, and as especially adapted to those cases of dropsy in which an irritable stomach renders the employment of ordinary diuretics impracticable. He has seen also the albumen in renal dropsy diminish under the use of the benzoate of ammonia.—*Thoughts on several Severe Diseases, &c.*

BINOXIDE OF MERCURY IN SKIN DISEASES.

M. Ibreisle has reported the results of his experience in the use of the binoxide of mercury as a local application, in diseases of the skin, especially those of a strumous or syphilitic origin. Indolent ulcers of the extremities have frequently yielded to this application, as have also phagedenic ulcerations. The author regards this preparation as an excellent remedy for the removal of the indurations which accompany syphilitic ulcers; he has likewise used it with success in pustular syphilides.

The formula is that of an ointment, consisting of one part of the oxide, to four or five of lead. Some caution appears to be necessary in its employment.—*Gazette Médicale*, Mars. 8, 1847.

RELATIVE VALUE OF DIFFERENT MEDICINES ORDINARILY EMPLOYED IN SYPHILIS.

A long memoir on this subject By MM. Boys de Loury and Costilhes closes with the following propositions:—

1. The preparations of gold and silver are worthless in constitutional syphilis.

2. The iodide of potassium has no influence upon the progress and duration of chancre, particularly the indurated variety; but in such cases mercury is to be preferred. The same may be said as respects buboes, mucous tubercles, papular and pustular syphilides.

On the other hand, the iodide of potassium is invaluable in syphilitic disease of bones, and in syphilitic tubercles of the skin with or without ulceration. It may be stated in general terms that the iodide is successful in proportion to the anterior duration of the disease, and the degeneration of the constitutional powers.

Iodide of potassium acts like a charm in nocturnal pains. United with the bin-iodide of mercury, it is valuable in syphilitic cachexia, and in cases which have resisted ordinary mercurial treatment.

3. Mercurial fumigations are only available in healing local symptoms, and should not be employed as a means of affecting the system.

4. Mercurial frictions should be used only in those cases in which irritability of the mucous membranes forbids the internal administration of mercury.

5. The proto-iodide of mercury is the best medicine which can be employed as an antisyphilitic, as well in the primary as the consecutive symptoms of the disease.—*Gazette Médicale*, Mai. 29, 1847.

COD-LIVER OIL.

M. Bretonneau has come to the conclusion, after many trials, that common train oil is quite as efficacious in struma and other cases in which it is given, as the cod-liver oil. This is an important fact if true, and demonstrates that the virtues of the latter oil are to be ascribed to its fatty principles, not to the small portion of iodine contained in it.—*Bulletin de Thérapeutique*, Janv., 1847.

TOXICOLOGY.

POISONING WITH CANTHARIDES.

Mr. Fisher was summoned to a gentleman, aged 26, who was seized with sudden illness during the night. He found him labouring under excessive vomiting, with urgent thirst; burning pain in the mouth and throat; countenance expressive of great anxiety; the tongue swollen; pulse 130, weak and tremulous. Vomited matter green and highly offensive. Upon inquiry, it appeared that he had taken what he conceived to be a dose of potass, but the residue of the drug being shewn to Mr. Fisher, that gentleman immediately recognized it to be cantharides in powder. Two teaspoonfuls had been taken. It was now ascertained that there was considerable strangury with bloody urine. The patient also complained of dull lumbar pain, and occasional priapism.

Vomiting was encouraged by warm water, and when the stomach had become somewhat quieted, repeated doses of a strong solution of gum-arabic were exhibited. Under this treatment he was greatly relieved; but cupping in the loins and free purging were subsequently thought necessary.

The peculiar interest in this case arises from the large quantity taken, and the rapid recovery. The largest dose recorded by Christison is one drachm, but it is evident in the present case, that double that quantity must have been taken.—*Medical Gazette*, May 14, 1847.

NOTICE OF THE LATE PROFESSOR LISFRANC, OF PARIS.

A lively interest is always felt about men of superior talent or great singularity, particularly when they have filled high public appointments and gained great notoriety or reputation in the world. Of the recently-living, few of our profession were better known to foreigners visiting the French schools, than M. Lisfranc. He was born in 1786, in a small village in the south of France, and at the age of twenty-six years had risen to the position of surgeon of the first class in the French army, in which capacity he served during several campaigns. Tired of this line of life, he went to Paris to pursue further his studies and engage in the practice of his profession. His fine talents and profound surgical knowledge soon attracted attention; he gave private lectures on various subjects during several consecutive years, and was at length appointed Hospital-Surgeon by the Council-general of the civil hospitals.

At La Pitié, Lisfranc distinguished himself by his clinical lectures, and he has often been described as a most admirable operator, using his knife with an enviable *sang froid* and with surprising dexterity, never being discomposed or thrown off his guard by any untoward event. He attained to a large private practice, and was consulted in the most important cases of uterine disease. A traveller from the Western World thus describes his first interview with Lisfranc:—

"I was seated with a bevy of young medical friends,

beneath the boughs of a wide-spreading elm, on a delightful summer morning, and saw him for the first time as he entered the hospital gate, and sauntered slowly along the gravelled walk of the long and wide avenue, leading to the ward containing his female patients. His head covered with a rusty black and red cap, which, in shape of a tea-cup, stuck like a plaster to the summit of his crown;—his long-waisted, scanty, snuff-coloured coat, dangling about his heels, and tapering away to sharpness like the tail of a kite;—his curiously-contrived pantaloons, loose and bagging about his hips, and at each stride fluttering to the wind;—his long shovel-shaped shoes, scattering pebbles as he walked, from right to left;—his arms standing out from his body, like the handle of a pump, conjoined with his out-stretched flexible neck, which swung to and fro beneath the pressure of his lengthy and wedged-shaped visage, presented one of the most ludicrous spectacles I ever beheld. He cast an inquiring side-long glance at our group, as he passed, which seemed to indicate, I thought, a belief that we were amusing ourselves at his expense, for he instantly bristled up, and with averted head hurried out of sight. We followed, and the next moment saw him stretching through the wards, his right hand grasping a speculum, and his left a brush for wiping the ulcerations after his instrument was applied. There were fifteen or twenty females labouring under the peculiar complaints, for the treatment of which he is so celebrated. Before commencing with these, however, he called the roll, to ascertain that all his *internes* or house-pupils were mustered at their posts, and refused to proceed until a delinquent, who was in bed taking his morning nap, was brought to the scene of action. He then began a clinical discourse, explaining the general nature of the diseases before him, waxing warmer and warmer as he proceeded, and gradually raising his stentorian voice, until its tones seemed to shake the foundation of the old building, and startle the very rafters above our heads; whilst he, peering and scanning from right to left the looks of his auditors with great self satisfaction, seemed to inquire into the effect his sesquipedalian words and thundering sentences may have produced upon their minds, and, after a few more sweeping oratorical flourishes, made a regular set-to at his patients, applying his instruments rapidly and without ceremony, giving each pupil a fair opportunity to see and judge for himself."*

A considerable proportion of the many hundreds of our countrymen, who have known and observed Lisfranc, will not fail to recognize the faithfulness of the preceding sketch of so singular a man, of whom it has been asserted, that his eccentricities of manner and dress, and his overbearing manner and behaviour, were assumed to produce an effect, and did not result from any want of the kindlier and better feelings of our nature. In one respect, however, the conduct of Lisfranc has met with general disapprobation and unreserved censure: his coarseness and freedom of defamatory remarks against his colleagues, or his rivals in reputation, to one of the most energetic and talented of whom, (Velpeau,) he has been heard to apply the words "*brigand, voleur, poltroon, &c.*" Between these rival *confréres* there seems to have been no love lost, Velpeau not unfrequently indulging in very severe and bitter remarks against Lisfranc. It is observed that, "fortunately these things are perfectly understood in Paris, and never produce any other consequences than a temporary excitement."

There is no doubt that Lisfranc's coarse language and overbearing manner made him unpopular with many of his fellow-practitioners, and told very disadvantageously upon his juvenile hearers. Some retribution for these mal-practices overtook him a few years since, by the publication of a spurious work, purporting to be his "Lectures on Diseases of the Uterus," by a former pupil, whom Lisfranc had greatly assisted and enabled to become a member of the medical profession. The renowned teacher had announced that he had amputated the neck of the womb in nearly a hundred instances, and that four-fifths of the cases were successful; whilst the spurious writer asserted that "not a single cure was ever performed by Lisfranc in the hospital!" The work was reviewed in some of the Journals very unfavourably for Lisfranc's reputation; but the name of its disreputable author is no longer to be found in the booksellers' catalogues, whilst every treatise from the pen of Lisfranc has been sought after with eagerness, and favourably received. He was the author of numerous memoirs on Fractures, Amputations, Dislocations, Diseases of the Arteries, White-swellings of the Joints, &c., published in the journals of the day; these, re-touched by the author, with many additional subjects, are contained in his *chef-d'œuvre*, the "*Clinique Chirurgicale de l'Hôpital de la Pitié*," in three octavo volumes, a work entitling Lisfranc to the gratitude of posterity, and establishing his reputation as one of the best of the practical teachers of surgery in modern times.

* Professor Gibson's "Rambles in Europe" in 1839.

ANECDOTES OF THE MEDICAL PROFESSION.

(Continued from page 334.)

VIII.—During this autumn Scott formed the personal acquaintance of Mungo Park, the celebrated victim of African discovery. On his return from his first expedition, Park endeavoured to establish himself as a medical practitioner in the town of Hawick, but the drudgeries of that calling in such a district soon exhausted his ardent temper, and he was now living in seclusion in his native cottage, at Fowlsheils, on the Yarrow, nearly opposite Newark Castle.

"On one occasion," Sir Walter Scott says, "the traveller communicated to him some very remarkable adventures which had befallen him in Africa, but which he had not recorded in his book." On Scott's asking the cause of this silence, Mungo answered, "that in all cases where he had information to communicate, which he thought of importance to the public, he had stated the facts boldly, leaving it to his readers to give such credit to his statements as they might appear justly to deserve, but that he would not shock their faith, or render his travels more

marvellous, by introducing circumstances, which, however true, were of little or no moment, as they related solely to his own personal adventures and escapes." This reply struck Scott as highly characteristic of the man; and though strongly tempted to set down some of these marvels for Mr. Wishaw's use, he, on reflection, abstained from doing so, holding it unfair to record what the adventurer had deliberately chosen to suppress in his own narrative.

Calling one day at Fowlsheils, and not finding Park at home, Scott walked in search of him along the banks of the Yarrow, which, in that neighbourhood, passes over various ledges of rock, forming deep pools and eddies between them. Presently he discovered his friend standing alone on the bank, plunging one stone after another into the water, and watching anxiously the bubbles as they rose upon the surface. "This," said Scott, "appears but an idle amusement for one who has seen so much stirring adventure." "Not so idle, perhaps, as you suppose," answered Mungo. "This was the manner in which I used to ascertain the depth of a river in Africa, before I ventured to cross it, judging whether the attempt would be safe, by the time the bubbles of air took to ascend." At this time Park's intention of a second expedition had never been revealed to Scott, but he instantly formed the opinion that these experiments on Yarrow were connected with some such purpose.

His thoughts had always continued to be haunted with Africa. He told Scott that whenever he awoke suddenly in the night, owing to a nervous disorder with which he was troubled, he fancied himself still a prisoner in the tent of Ali; but when the poet expressed some surprise that he should design again to re-visit those scenes, he answered, that he would rather brave Africa, and all its horrors, than wear out his life in long and toilsome rides over the hills of Scotland, for which the remuneration was hardly enough to keep soul and body together.

Towards the end of the autumn, when about to quit his country for the last time, Park paid Scott a farewell visit, and slept at Ashestiel. Next morning his host accompanied him homewards over the wild chain of hills between the Tweed and the Yarrow. Park talked much of his new scheme, and mentioned his determination to tell his family that he had some business for a day or two in Edinburgh, and send them his blessing from thence, without returning to take leave. He had married, not long before, a pretty and amiable woman; and when they reached the Williamhope Ridge, "the autumnal mist floating heavily and slowly down the valley of the Yarrow," presented to Scott's imagination, "a striking emblem of the troubled and uncertain prospect which his undertaking afforded." He remained, however, unshaken, and at length they reached the spot at which they had agreed to separate. A small ditch divided the moor from the road, and, in going over it, Park's horse stumbled, and nearly fell. "I am afraid, Mungo," said the Sheriff, "that is a bad omen;" to which he answered, smiling, "Freils (omens) follow those who look to them." With this expression Mungo struck the spurs into his horse, and Scott never saw him again.—*Lockhart's Life of Sir Walter Scott*, vol. II., p. 10.

IX.—Dr. Hunter had, in the year 1765, in the most liberal way, proposed to the then Ministry, to build a public theatre of Anatomy, at an expense to himself of £7000, and to endow a professorship of anatomy in perpetuity, on condition that they would grant a piece of ground in the Mews as a site for the building. But Lord Grenville and his colleagues, with the apathy which the English government has too often shown to the interests of science, declined the offer. Lord Shelburne was desirous that the plan should be executed by subscription, and generously requested his name should be put down for one thousand guineas. Dr. Hunter's delicacy, however, led him to decline this proposal, and he determined to erect a building at his own expense. For this purpose he purchased a spot of ground in Great Windmill street, where he built a spacious house, with a theatre and museum, to which he removed in 1770, passing over the lease of his house in Jermyn Street to his brother John.—*The Works of John Hunter, by J. F. Palmer*, Vol. I, p. 35.

Medical Intelligence.

PROPOSAL FOR A PROVISION FOR THE WIDOWS OF MEDICAL MEN.

A letter has been published by our associate, Mr. H. L. Smith, of Southam, advocating the formation of a Society of Mercy to the sick poor, and the establishment of homes and a general provision for the widows of medical men; and he appeals to the public in support of the latter object, on the ground of the exertions made, often without fee or reward, and danger incurred by medical men in discharge of their duties, and especially at a time like the present, when fever is so extensively prevalent in certain districts.

"Let a sufficient fund," he observes, "be raised to carry out the following scheme: let there be convenient houses built in the county town and other populous places, and fitted up as convenient suits of apartments, well aired, however small: let these rooms be apportioned among the poorer widows of medical men, to whom there should also be assigned an income, however moderate, upon which, without anxiety, they could rely. There would be, I have no doubt, many candidates, who for this provision would devote with pleasure and gratitude their declining years to the guardianship of the sick and infirm. They would hardly fail to be peculiarly qualified for such functions. I do not, of course, mean that they should take the whole labour as sick nurses; they would be more useful as constant visitors and superintendents, and would serve as organs of communication between the contributors to the fund and the objects of their care, being responsible to a Board elected by these contributors, and by whom they would in return for the information they would be able to give, receive every encouragement and assistance in the fulfilment of their duties.

ACADEMIE DES SCIENCES, PARIS.

Mr. Graham, Professor of Chemistry in the University of London, has been elected a Corresponding Member of the Academy of Sciences, in the room of Mr. Hatchett, deceased.

MEDICAL APPOINTMENTS.

Benjamin Travers, Esq., F.R.S., has been elected President of the Royal College of Surgeons, in the room of Mr. Lawrence; and Edward Stanley, Esq., F.R.S., and Joseph Henry Green, Esq., F.R.S., have been elected Vice-Presidents of the College for the ensuing year.

Charles J. B. Aldis, M.D., has been appointed Physician to the Metropolitan Free Hospital.

Thomas Ingle, M.D., late of Jersey, has been elected Physician to the West Norfolk and Lynn Hospital, in the room of Dr. Wayte, deceased.

M. Chassaignac has been appointed Surgeon to the Hôpital des Enfans, Paris.

M. Huguier has been appointed Surgeon to the Hôpital Beaujon, Paris, in the room of M. Laugier, lately appointed to succeed M. Lisfranc, at the Hôpital de la Pitié.

ROYAL COLLEGE OF PHYSICIANS.

The following gentlemen have been elected Fellows of the College:—Sir George Magrath, M.D., Plymouth; H. B. Leeson, M.D.; Southwood Smith, M.D.; Peter Nugent Kingston, M.D.; John Taylor, M.D.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, the 16th instant:—J. F. Jones; G. G. Winstone; J. Leslie; J. C. Dukes; F. Greenwood; T. B. Forster; F. Farmer; W. G. Gill; J. Lancashire; W. T. Domville; W. F. Vidal; H. Shelley.

Gentlemen admitted Members on Friday, July 23rd, 1847:—C. P. Markus; W. H. Ackland; W. J. Blyth; H. Turner; J. L. Holloway; J. O. Evans; C. A. Walters; A. H. Paterson; J. Adolphus; J. H. Buxton; W. H. Popham.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates Thursday, July 8th:—William Henry Cook, Surrey; Edmond Archer, London; Michael Hoole Ashwell, Longdon, Staffordshire.

Thursday, July 15th:—Henry Alfred Warburton, Websey, Bradford; Jas. Braid, Manchester; Chappell May Empson, Crediton; James Lancashire, Land, near Bury; Oliver Pemberton, Birmingham; Hugh Robert Rump, Wells, Norfolk.

OBITUARY.

Died, July 2nd, at Waterford, of fever, John Price, Esq., M.D.

July 7th, of fever, R. B. Barlow, Esq., one of the Union Surgeons for the Blackburn district.

July 10th, at Paddington, aged 57, William Hopeful Lerew, Esq., Surgeon.

July 10th, at Coventry, aged 59, Henry Ronalds, M.D.

July 14th, at Nenagh, of fever, aged 27, J. B. Fletcher, M.D., one of the Physicians of the Nenagh Fever Hospital.

July 17th, at Leeds, aged 40, Francis Sharpe, Esq., of fever, caught while discharging the duties of district surgeon, which he had undertaken during the illness of Mr. Taylor.

July 19th, Richard Morice Tobin, M.D., Surgeon of her Majesty's Dockyard, Devonport.

Lately at Lynn, John Wayte, Esq., M.D., aged 58. He was an Alderman of the borough; twice Mayor; formerly Physician to the Lynn Dispensary, and also Senior Physician to the West Norfolk and Lynn Hospital. He died much respected, particularly by the poor, to whom he was always a ready professional friend.

Lately, at Ballyfarnham, of fever, — Hawkesworth, M.D.

BOOKS RECEIVED.

Report on the Recent Progress of Chemistry, in its Relations to Medicine. By George Edward Day, M.A., L.M., Cantab., &c. (From the "Half-yearly Abstract of the Medical Sciences.") pp. 34.

On the System of the Great Sympathetic Nerve. By C. Radcliffe Hall, M.D., M.R.C.S., Engl., &c. Part 1st. 8vo. pp. 125. Plates.

On the Causes and Treatment of Abortion and Sterility, &c. By James Whitehead, F.R.C.S., Surgeon to the Manchester and Salford Lying-in Hospital. London: Churchill. 1847. 8vo. pp. 426.

The Preservation of Infants in Delivery; being an Exposition of the Chief Cause of Mortality in Still-Born Children. By Richard King, M.D., M.R.C.S., Physician Accoucheur to the Blenheim Street Dispensary, &c. &c. London: Churchill. 1847. pp. 60.

Fourth Annual Report of the Managers of the State Lunatic Asylum. Albany, U. S. 1847. 8vo. pp. 80.

The Retrospect of Medicine, &c. Edited by W. Braithwaite, Lecturer on Obstetric Medicine at the Leeds School of Medicine, &c. Vol. XV. January—June, 1847. London: Simpkin, Marshall, and Co. 1847. pp. 472.

ERRATA.

At page 378, col. 1, line 25, for "at a distinct precipitate. Lime, either," &c., read "as a distinct precipitate, since either," &c.; l. 27, for "occurred," read "it occurred;" l. 35, for "connective," read "concentric."

TO CORRESPONDENTS.

Communications have been received from Mr. S. Cobbold; Dr. Addison; Mr. A. Prichard; Dr. Cotton; Dr. J. Campbell; Mr. W. Allison; Dr. J. H. Pickford; Dr. H. Bennet; Mr. F. Buckell; Dr. Kingdon; Mr. T. C. Girtin.

It is requested that all letters and communications be sent to Dr. Streeten, Foregate Street, Worcester. Parcels and books for review, may be addressed to the Editor of the Provincial Medical and Surgical Journal, care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ANNIVERSARY MEETING.

The Fifteenth Anniversary Meeting of the Association was held at Derby, on Wednesday, the 4th, and Thursday, the 5th of August, 1847.

The following gentlemen recorded their names in the book kept for that purpose:—

John Green Crosse, Esq., Norwich; John S. Soden, Esq., (late of Bath,) Sunbury, Middlesex; James Mackness, M.D., Hastings; Richard Chambers, M.D., Colchester; Jas. Crang, Esq., Timsbury; Geo. Soulby, M.D., Dover; Thomas Martin, Esq., Reigate; William Conolly, M.D, Cheltenham; John Conolly, M.D., Hanwell; Robert J. N. Streeten, M.D., Worcester; Charles Hastings, M.D., Worcester; Edmund Lyon, M.D., Manchester; Thos. Nursaw, Esq., Broughton, Manchester; James Heygate, M.D., Derby; Samuel Crompton, Esq., Manchester; S. W. Fearn, Esq., Derby; Richard Broadbent, Fsq., Altringham; John Churchill, Esq., London; W. Newnham, Esq., Farnham; Christopher A. Newnham, Esq., Farnham; William O. Newnham, Esq., Farnham; Thomas Nunneley, Esq., Leeds; W. R. Lomas, Esq., Parwich; Wm. Gill, M.D., Nottingham; Thomas Hodgkin, M.D., London; Booth Eddison, Esq., Nottingham; Marshall Hall Higginbottom Esq., Nottingham; Frederick Tinker Esq., Hyde, Cheshire; John Higginbottom, Esq., Nottingham; Francis Sibson, Esq., Nottingham; George Taylor, Esq., Derby; W. Cantrell, Esq., Wirksworth; J. Whitaker Johnson, Esq.; John Wright, Esq., Derby; James Kennedy, M.D., Loughborough; John Johnson, jun., Esq. Derby; Thos. Heygate, Esq., Market Harbro'; Saml. H. Evans, Esq., Derby; John Henry Eddows, Esq., Loughborough; David Davies, Esq., Lougborough; J. Hodgson, Esq., Birmingham; J. Russell, M.B., Birmingham; James Johnstone, M.D., Birmingham; Richard Thomas Tasker, Esq., Melbourne; Thomas Wood, Esq., Derby; Richard R. Allen, Esq., Belper; George A. Cope, Esq., Etwall; W. H. Fletcher, Esq., Ripley; M. Martin de Bartolomé, M.D., Sheffield; Henry G. Bull, M.D., Hereford; John Johnson, Esq., St. Alkmunds; John Wightman Lilly, Esq., Ollerton; Edwards Crisp, Esq., Camberwell; A. Robertson, M.D., Northampton; J. H. Walsh, Esq., Worcester; Thomas V. Heygate, Esq., Hanslope; Charles Borough, Esq., Derby; Henry F. Gisborne, Esq., Derby; Augustus G. Greaves, Esq., Derby; Charles Evans, Esq., Winster; Thomas Lomas, Esq., Belper; E. J. Shearman, M.D., Rotherham; W. E. Boddington, Esq., Chesterfield; Charles J. Shearman, A.B., Rotherham; D. Rice, Esq., Stratford-on-Avon; William White Cooper, Esq., London; S. Hare, Esq., London; Henry C. Boisragon, M.D., Cheltenham; James Paxton, M.D., Rugby; G. Spencer, Esq., Alfreton; Robert Hamilton, Esq., Derby; J. Hatton, Esq., Manchester; James Whitehead, Esq., Manchester; T. P. Teale, Esq., Leeds; J. Toogood, M.D., Torquay; H. F. Burman, Esq., Henley-in-Arden; H. B. Steele, Esq., Stoke Ferry, Norfolk; H. L. Smith, Esq., Southam; Lieut. C. S. Salmon, Stoke Ferry, Norfolk; Thomas Radford, M.D., Manchester; D. P. Evans, Esq., Belper; Thomas Brown, Esq., Castle Donington; E. Williams, Esq., Wrexham; Charles Radcliffe Hall, M.D., Holmes Chapel; Wm. Charles Rudkin, Esq., Derby; Thomas Charles Cade, Esq., Spondon, near Derby; Richard Flint, Esq., Stockport; W. Price, Esq., Leeds; Samuel Smith, Esq., Leeds; Ferguson Branson, M.D., Sheffield; W. H. Ranking, M.D., Norwich; Samuel Hey, Esq., Leeds; Thomas Paget, Esq., Leicester; George Curme, Esq., Dorchester; John Thurnam, M.D., York; Thomas Poyser, Esq., Wirksworth; John Skevington, Esq., Ashbourne; John Williams, Esq., Sudbury; John Ashford, Esq., Hinckley; William Hallis, Esq., Alvaston; Michael Thomas Jones, Esq., Strandlow; G. M. White, Esq., Nottingham; T. A. Burrows, Esq., Snewton; Henry Brigstoke, Esq., Derby; Henry Taylor, Esq., Nottingham; William Jackson, Esq., Sheffield; G. Reedall, Esq., Sheffield; George Oldham, Esq., Alfreton; Kenrick Watson, Esq., Stourport; R. S. Hutchinson, M.D., Nottingham; &c., &c.

FIRST GENERAL MEETING.

A Meeting of the Council was held at ten o'clock in the morning, when arrangements were made for the transaction of the business of the Meeting.

At one o'clock, according to previous arrangement, the First General Meeting of the Association was held in the Town Hall, when about two hundred gentlemen were assembled.

On the motion of Dr. HASTINGS, the Chair was in the first instance taken by Mr. CROSSE, the retiring President, who said—

Gentlemen,—I have now the honour to address you as President for the year about to close, and I can assure you that the duties of the office I have filled have been very light. The transactions of the Society for the past year that require to be brought before the Meeting, will be found in the various reports that will be presented to you; and it is only necessary therefore for me to say a very few words. To our profession, gentlemen, time is most valuable, and to me it appears an imperative duty to look to deeds rather than words, when I meet the members of the medical professson. I can only say, unimportant as my duties have been, they have been important to myself as I conceive, having been placed by you in such a situation as I have been. I retire from that situation with feelings of thankfulness, if I escape your disapprobation, and I shall be happy during my after life, to extend to you those studies which have always been delightful to me. I need not detain you further than by introducing to you Dr. Heygate, of this important district, who will I hope, as President of your Society for the ensuing year, conduct your business with more ability than I possess.

President's Address.

Dr. Heygate, on taking the Chair, addressed the Meeting as follows:—

Gentlemen,—I should ill disguise my feelings were I not, at the onset, to declare that the duties which devolve upon me as your President, I undertake with extreme diffidence, mistrustful as I feel I am of power to do due honour to the appointment, and knowing that my claims for so distinguished an office are feeble when compared with those of many who have preceded me.

What, however, I want in talent, shall be made up in zeal, to promote the objects of this great and growing Association, spread as it is over the length and breadth of the land, and numbering as it does, to the amount of nearly 2000 members, the élite of the Provincial Medical Profession, and not a small number of the talent of the metropolis itself. And what are its objects, especially those of meetings like these? To unite man to man in upholding the dignity, the science, the respectability, of our common profession;—to promote good fellowship amongst all its members;—to expand and warm the hearts of each other towards the promotion of that calling which, next to the Clerical, is avowedly the most important;—to stimulate each other in the onward course of advancing medical science, and social good feeling;—to rub off the rust which conflicting and selfish interests are too apt to engender;—to brighten up the prospects;—to reassure the toil-worn harrassing life of a medical man, that, by unflinching integrity of conduct, he will seldom fail of reward, and that even should he, there is connected with our Association a Benevolent Fund, showing at least sympathy for all his cares, and marked interest for unforeseen troubles which may befal him or his family.

Gentlemen, in my humble opinion, the anniversary meetings of this Society are like an oasis in the desert—a bright spot in the toilsome career of a medical man; and when he returns to his home, if a year's jostling with a sharp competition, (which, perhaps, all professions are now equally subject to with our own,) has somewhat warped his mind, or soured his disposition, he will find all these feelings much softened, if not wholly removed, and will buckle to, with renewed energy, for all that is good in our profession. In short, gentlemen, he must return from these meetings a better man, a better citizen, a better friend.

This, at least, is my own experience, and when I have had the good fortune to be present at these annual gatherings, I candidly acknowledge that they have had the most salutary inufluence on me, and that I consider them amongst the happiest periods of my professional life.

Let us hope that this Anniversary will not be behind those that have gone before it, in cementing still closer that bond of union,—that kindly feeling of brotherhood, which should characterize every section of a liberal and learned profession.

My great admiration of this Society has been the high tone of feeling, the calm and the temperate spirit which have universally pervaded all its proceedings. Who can read the editorial articles of the Journal, addressed as they are to every shade of disposition, and not be struck with the forbearance, the spirit of conciliation, as well as the talent which invariably mark them.

Talk of Medical Reform, gentlemen, much as it is wanted, more, in my humble opinion, depends upon ourselves. The words which were quoted on a former occasion, and which were originally uttered by a learned member of our own Association, I cannot do better than repeat. "We should not forget that the true elements of Medical Reform are rather personal than corporate; that a high standard of individual conduct must be adopted, if, as a body, we would be purified; and that whatever delays may attend the introduction of Legislative Reform, there is a power intrusted to every one of us, of internal reformation;—of a sound and healthy training of the morals and intellectual faculties;—of diligence in the pursuit of science;—of modesty in the self-estimation of attainments;—of moderation in all desires for mere applause or emolument;—of refusal to stoop to what is selfish and degrading;—of rightly estimating the holy luxury of doing good—a power far more important than the best regulated charters, the true and only lasting element of our individual and collective prosperity. It has been truly said that a profession, every member of which has these qualities in abundance, might have quacks for its rivals, but would triumph without a combat."

Gentlemen, these are words of strong import; and since Parliament has allowed another Session to pass without redressing our grievances, they ought to be indelibly fixed upon our minds.

Having touched upon the subject of Medical Reform, it is but an act of justice to Sir James Graham to say, that in the bill he introduced into Parliament in the capacity of Minister of the Crown, no man apparently could show a greater inclination to meet the wishes, and consult the interests of every branch

of the profession, and permanently to settle, in a liberal and enlightened spirit, this "*quæstio vexata*;" but, alas! so many conflicting interests did he find afloat,—so many contradictory opinions advanced, that after amending and re-amending the bill, he gave up the measure in despair,—I was almost going to say, in disgust. We cannot be advocates of one body of practitioners against another; circumstances have produced, and custom has sanctioned, the division of medical men into physicians, surgeons, and general practitioners; and the great wisdom of these classes would be to work together in harmony; and we would strongly urge upon all, that the settlement of this question, by legislative enactment, must be dependent upon some approach to unanimity, in the concession of minor points, being manifested by the different sections of our profession. Peradventure *each* must give up *some* favourite crotchet of his own for the public weal.

In the session just ended, the simple solution of some of the difficulties has been attempted by the introduction of the Medical Registration Bill; but even this measure, unobjectionable as it would appear, has met with strenuous opposition where one would least have expected it; and no sooner does Sir George Grey receive opposing deputations from two corporate bodies, than, in his place in the House, he begs to inform the Hon. Member who brought in the bill, that in consequence of the differences of opinion, the government cannot lend its sanction to the measure. Seeing however, increased intelligence, and a love of science rapidly pervading our ranks, I, for one, do not at all despair living to see all minor differences sunk, and a comprehensive view taken of all that concerns the well-being of our common profession; *for it is clear that it is this want of harmony* which has as yet stood in the way of salutary legislation.

But I have wandered from the more pleasing part of my duty, which is, in the name of the local Council and the profession generally, cordially to welcome the members of the Association to the good old town of Derby; and to thank them for the high compliment they have paid this borough in selecting it as the place of meeting. We cannot pride ourselves, like the city of Norwich, where you last met, in possessing objects equally varied and interesting to the lover of the fine arts. In an architectural point of view, we have no splendid cathedral, but we would fain direct your attention to the tower of All Saints' Church, one of the most noble in the kingdom, of peculiar beauty, displaying the latest style of florid gothic.

Those also of you who admire temples, reared for the worship of the living and true God, combining chaste elegance with extreme simplicity, removed alike from dazzling gaudiness and the barn-like buildings which seemed so much to be the fashion at one time, cannot do better than visit the interior of the church of St. Alkmund, recently erected, from a design of Mr. Stevens, of this town, whose church architecture here, as elsewhere, does him infinite credit. I may mention, as a proof of talent, and what is no mean desideratum in these utilitarian days, that I have frequently heard it remarked, by those much more competent to judge than myself, that they have seldom or ever seen so effective a building at so small a cost.

I cannot omit to mention the Arboretum, the munificent gift of that benevolent man, the late Mr. Joseph Strutt. These grounds were planned and completed with exquisite taste, by the late Mr. Loudon, the well-known landscape gardener, and, considering that he had a flat unpicturesque piece of ground to deal with, whatever the hypercritical may have said, and some were not sparing in their remarks,—all must now agree, that, with a strong prospective eye to the future, he arranged the embankments, and planted the shrubs and trees, with consummate skill. As grounds, set apart for so good a purpose as these are, are of vast importance in a manufacturing town like ours, being so conducive to the health, recreation, and improvement of the people, I may be pardoned if I quote the concluding part of the worthy donor's address on presenting this noble gift to the town:—

"If we wish to obtain the affection and regard of others, we must manifest kindness and regard towards them; if we seek to wean them from debasing pursuits and brutalizing pleasures, we can only hope to do so by opening to them new sources of rational enjoyment. It is under this conviction that I dedicate these gardens to the public; and I will only add, that as the sun has shone brightly on me through life, it would be ungrateful in me not to employ a portion of the fortune which I possess in promoting the welfare of those amongst whom I live, and by whose industry I have been aided in its acquisition."

The concluding sentence needs no comment of mine. It touches a chord in the heart of every man, that must respond to the right feeling which could dictate it.

I cannot take up your time, precious always to medical men, and too brief for what we have to do on an occasion like this, by enumerating the other objects in the town and this highly interesting county, worthy your attention; the card given to each visitor on his arrival will specify some of those most interesting in the town.

Neither can I go into the sanitary condition, or the diseases most prevalent, in this district. I may only mention my firm conviction that, as the town is so well situated for effectual drainage, it might, by a more perfect sewerage, the removal of interments from our crowded church-yards, together with a better supply of water, be rendered one of the healthiest manufacturing towns in the kingdom. That the people generally are becoming more enlightened on this subject there can be no doubt, and if the Government would lend all the aid in its power towards carrying out sanatory measures, not only would an enormous amount of misery be saved, but an extent of happiness would be gained of which we have at present only a faint idea; for impure air not only depresses our physical but mental powers.

It is now a painful part of my duty to call your attention to the loss the Association has sustained in the death of Dr. Favell, who so lately filled the office of President. I am indebted to Mr. Favell for the following brief particulars:—

Dr. Favell was educated by his father, (a Surgeon-Apothecary, of Sheffield,) with a view to their being associated as general practitioners. Conjoined to an apparently robust frame, he had a delicate organization, and on entering upon the arduous duties of a general practitioner, he soon found that he had neither strength to follow it out satisfactorily, nor time to pursue the more scientific and, to him, *more congenial*, part of his profession advantageously he therefore, with the forethought and resolution that were characteristic of his actions, determined on studying at Edinburgh, and qualifying himself to relinquish general practice for that of physician as soon as he could do so consistently with his duty to, and affection for, his father. While at Edinburgh he was remarkable for the peculiar steadiness of his conduct, and the closeness of his application. After practising in conjunction with his father for about four years, an opportunity presented itself by which he was enabled to enter upon the more congenial walk of his profession. He was then 27 years of age, and it may be said of him, without fear of contradiction, that from that period to the hour of his death, at the age of 43, the object constantly before him was *to do his duty* both as a man and a physician. How far he succeeded in that object in the *latter* capacity, the Provincial Association can form some estimate; how far he succeeded in the two capacities combined, those who more intimately knew and more deeply lament him can best judge. In the year 1832 he was elected one of the physicians to the Public Dispensary at Sheffield, at its first establishment, from which he retired on being elected in 1838 one of the physicians to the General Infirmary. This opened a field for his patiently-inquiring mind to investigate disease, and acquire knowledge on a broad and firm basis. Of that very essential mode of obtaining sound instruction, *post-mortem* examinations, he was ever most anxious to take advantage, and the Sheffield Medical Society derived much interesting information from his labours in that respect.

Within the last two or three years of his valuable life Dr. Favell was gradually acquiring good and extensive practice, from which a variety of causes had for many years debarred him. The *ground* was fully occupied; he had no idea of *elbowing* his way through a crowd; he was considered by many too grave in his deportment towards the afflicted, and by many others too sectarian a physician, being a staunch, conscientious, and consistent member of the Evangelical Church of England. Though in the social circle very conversational, lively, and humourous, he assumed and *felt*, in serious cases, a seriousness of manner and expression that were probably sometimes depressing to the patient and somewhat injurious to his own advancement. But although he was kept in the shade *he did not lose time*; he did not spend his long leisure hours in repining, or in diversions, or in indolence. No! if the twelve years intervening between the ages of 28 and 40 were not spent in active bodily practice, they were occupied by mental labour of a most useful and delightful kind; he was assiduously cultivating the "talents" intrusted to him, well knowing it to be the only road to competency and happiness for himself, or satisfaction and benefit to those who might be confided to his charge. As an active member of the Provincial Association, whose prosperity lay very near his heart, as one of the physicians to the General Hospital, as one of the physicians to the Cholera Hospital in 1832, as lecturer on the practice of physic at the Sheffield School, as a member of the Philosophical Society, (which he latterly retired from,) as an occasional lecturer before the Church of England Instruction Society, he found, amongst other things, either in preparation or execution, ample employment. If not *profitable* it was *congenial*, and, combined with his ready talent as a public speaker, led the way to that growing estimation whose full ripening he was not destined to enjoy.

In his boyhood, Dr. Favell had a small strumous abscess in the side, which, though long in healing, was not detrimental, except as it evinced a delicacy of constitution, which rendered him liable to be disordered by slighter causes than would affect most persons in ordinary health. Dr. Favell's habits were very regular and abstemious, and he rarely suffered from indisposition till about the beginning of 1845, when he complained, (and he was ever slow to complain,) of uneasiness in his back. This was accompanied by a peculiar, though only *occasional*, hard, hoarse cough. On examining the back there was considerable tenderness experienced on pressing the third and fourth dorsal vertebræ. Cupping over the tender part was resorted to, and occasionally repeated with marked relief. His general health was good, and he followed his professional duties actively; though, if his lungs were much excited by walking quickly, or speaking hurriedly, there was frequently a wheezing expiration, and a recurrence of the hoarse dry cough, which created some anxiety amongst his more observant friends. About this time he became troubled with hæmorrhoids, one of which slowly suppurated, leaving a slight fistulous discharge that never entirely ceased.

The assembling of the Provincial Association at Sheffield in the summer of 1845, was a matter of great and delightful interest to him. How far he succeeded in fulfilling the anxious duties of the Presidency, the Society is best able to judge. At this period he was looking very well, was in good health and spirits, was becoming actively engaged in excellent private practice, and cheering himself and his friends with the confident expectation that all his little ailments were fast subsiding. The same hoarse cough, without expectoration, and the same laryngeal kind of wheeze, troubled him occasionally. On this account his chest was accurately examined, but nothing abnormal was discovered except a slight dulness under the right clavicle, and in the vicinity of the dorsal vertebræ, where he had long had uneasiness. Early in the spring of 1846 he took cold, (of which he was very susceptible,) and had in consequence a smart attack of fever, which was shortly subdued by ordinary treatment, and left no trace of mischief. In the beginning of June he came home to dinner one day after seeing his out-patients at the Infirmary, and whilst dining was seized with a very severe rigor. This was followed by another attack of

fever, more severe than the former one, and in spite of the means used the fever hung upon him. He began to cough rather more, expectorate a little, but *very* little. His nights were restless; perspirations rather profuse, and appearance languid; still there were no urgent or alarming symptoms threatening any serious mischief, and the stethoscope gave no more information than it had previously done. Early in July he began to rally from the fever, and removed outside the town, thinking the change would soon completely renovate him; and with christian hope, unvarying cheerfulness, and undisturbed serenity, he looked forward to a speedy renewal of his interesting professional duties, and the comforts of his happy home. He progressed gradually towards convalescence, though the delicacy of his aspect, and the evidence of *some*, though not very clearly *what*, mischief, made his friends very anxious about the result, though he himself was quite sanguine of speedy recovery. Certainly his flesh and colour were returning a little; his pulse improved; his nights were good; the perspirations diminished; and his appetite and strength decidedly improved. Thus circumstanced he started, early in August, for Worthing, bore the journey very well, and in about a week wrote from thence in excellent spirits, saying, "I have walked farther to-day than I have ever done yet, and with much less fatigue. My cough is about *statu quo*; expectoration *nil*. I take no medicine, as I am doing very well, and don't wish to interfere with the *vis medicatrix naturæ*." On the 29th of August he writes, "My cough, perspirations, and general health, are all improving. My own impression is that I am now gradually recovering." On September 5th, (five days before his death,) he writes, "I am thankful to be able to send you a good account of myself. This is decidedly the best week I have had for three months. I have scarcely had any cough for the last four or five days. I have no expectoration; appetite good; secretions perfectly natural; sleep like a top, and breathe like a child on either side." Three days afterwards he writes, "We were somewhat alarmed on Monday morning by a smart hæmoptysis. A Mr. Gore was called to me. He is exceedingly kind, and is treating me so properly, that there has been no symptom of any return, and I now feel quite as well as I previously did." On the day after writing thus he was reclining on a sofa, having prepared to ride out, when the hæmoptysis suddenly returned without any premonitory symptom, and to such an extent, that in a few minutes he sank back a corpse.

Gentlemen,—If Dr. Favell could be said to have applied his mind more peculiarly to any one class of diseases than another, affections of the chest, so interesting and frequently so obscure, appeared to receive his more anxious attention. He knew how much of interest, and anxiety, and suffering, and death, they too frequently involve; and the benevolence of his mind probably conducted him to their investigations with more sympathizing ardour, little anticipating that he would himself prove an early martyr to, and an interesting example of, the many-headed monster he was endeavouring to combat. He was preparing to publish on some of these diseases when his fatal illness commenced.

It is a melancholy fact that many who have devoted almost exclusive attention to affections of the chest, have themselves fallen victims to some disease of the thoracic viscera. Laennec, to whom the profession is so much indebted, died of disease of the lungs, as did also Dr. Hope, who pursued his stethoscopic investigations with a zeal beyond all promise. And, to descend into the regions of empiricism, even St. John Long, who, some years ago gained such notoriety in London, on account of his boasted success in the treatment of consumption, and, in his web, entangled not a few of the aristocracy, fell an early victim to the very disease on which he had based all his celebrity.

Some of our Associates in the large manufacturing towns have also, during the last few months, fallen a sacrifice to fever caught during their arduous attendance on the poor; and though I would be far from discouraging gratuitous services rendered to the poor, feeling the force and the truth of those beautiful words, that "the poor are our best patients, for God is their paymaster," we cannot close our eyes to the fact, that with many medical men their time is their only estate: and this brings me most deeply to regret that the Poor-Law Guardians should, generally speaking, so ill requite the services of their medical officers,—given, as in many instances of late, under circumstances so painful and hazardous. I know of no remedy for this, circumstanced as we are at present, but that district surgeons should be true to themselves, and as a body, resist most determinately this degrading mode of payment. I agree with the suggestion that it would be better to make attendance on the poor an honorary appointment altogether, than to submit to the paltry pittance which is given in some districts.

In conclusion, whatever system be the best to adopt, let us never forget, that where it is in the power of medical men to render assistance to the poor,—that is, where they have the means and time at command, they are only carrying out the principle of that Divine Being who, whilst on earth, "went about doing good," and whose beneficence was the most prominent, as the most lovely trait of His character.

Dr. Streeten then read the—

Report of the Council.

The Council of the "Provincial Medical and Surgical Association," in laying before the Fifteenth Anniversary of the Association their Annual Report, have to record the continued prosperity and steady progress of the Association. The number of members entered on the books amounts to 1858, the changes which are now annually taking place in consequence of the retirement from practice of some of our earlier associates, the removal of others to remote or foreign places of residence, and the loss of many of our number by that inevitable decree to which all in time must yield, being numerically more than counterbalanced by the fresh additions to our ranks.

Finance.

The general statement of receipts and expenditure during the past year is as follows:—

	£.	s.	d.
Balance brought forward.....	113	7	7
Receipts	1304	1	8
Total.....	1417	9	3
Expenditure	1439	19	7½
Balance due to Treasurer	22	10	4½

The more detailed statement of accounts will be brought forward by the Treasurer, but the Council are desirous of pointing out that the amount of expenditure has been greatly increased beyond the actual yearly demand upon the funds, by the discharge of the balance of the award made in the claim of Dr. Hennis Green, nearly the whole of which has become chargeable on the ordinary revenue of the Association. The Council may take this opportunity of impressing on the Members generally the great importance of punctuality in the payment of the Subscriptions, as without due regularity in this respect it becomes impracticable to afford to Members those advantages, and especially in the improvement of the publications, which they might otherwise expect to receive. They regret to say that the amount of receipts this year is less than usual, in consequence of a considerable number of Members being in arrear.

PUBLICATIONS.

In the last Annual Report the hope was expressed that, from the arrangements then in progress, the Volume of "Transactions" might be issued to the Members before the close of the past year. The state of forwardness in which the printing of the Volume lately published was at that time, fully justified the Council in the anticipation; but circumstances connected with the getting up of some of the papers, which the Council could not foresee, and over which they had no control, prevented the realizing of this hope. The Council are, however, encouraged to think that the value of the communications referred to will amply repay the delay which resulted in their progress through the press. The *Journal*, in accordance with the unanimous recommendation of the Committee appointed at the preceding Anniversary, at Norwich, "to inquire whether any, and what alteration was required or desirable in the general publications of the Society," has, from the commencement of the present Volume, been published every alternate week in an enlarged form. The Report in which this alteration was recommended was addressed to the Council by the Committee, and will be laid before the Meeting, together with a second Report from the same Committee, in which further improvements are suggested. The Council cannot conclude this portion of their Report without recording their gratification at observing, that since the change alluded to has taken place in the *Journal*, there has been a marked improvement in the character of the communications generally, and especially that, from the space now capable of being devoted to such objects, the original Essays and Reports of Cases are of a higher and more elaborate description.

MEDICAL REFORM.

At the last Anniversary, a petition to both Houses of Parliament was agreed upon, and signed, on the part of the Meeting, by the President, Mr. Crosse, in favour of the Registration Bill, then just introduced into the House of Commons. This petition was duly presented, but from the late period of the Session at which the Bill was brought forward, the measure was not then proceeded with. The Council of the Association, with the concurrence of the Committee appointed at Norwich to advise with them on this subject, addressed a memorial to Sir George Grey, Her Majesty's Secretary of State for the Home Department, during the recess, explaining the leading principles adopted by the Association in reference to the improvement and consolidation of the Medical Profession, and urging the immediate adoption of a registration on some simple and comprehensive plan of all duly qualified Medical Practitioners resident in the United Kingdom, as a preliminary measure to those further changes which are so imperatively called for. Early in the Session of Parliament just ended, the Council, through the good offices of Sir Denis Le Marchant, then one of the members for the city of Worcester, succeeded in obtaining an interview with Sir George Grey for a deputation, consisting of the President of the Association, Mr. Crosse, and the President of the Council, Dr. Hastings, accompanied by Sir Dennis Le Marchant. On this occasion the Deputation were instructed to impress the principles adopted by the Association, and hitherto acted on in all their reports and published documents, and at the same time to point out,—the advantages of the registration as a preliminary measure to the present consolidation and future improvement of the great mass of the profession; the importance of an uniform and efficient primary qualification in every branch of medical science to be required from all entering the profession, together with the adoption of the representative system in the constitution of the several governing bodies of the Corporate Institutions. In compliance with a suggestion made by Sir George Grey to the Deputation, the Council endeavoured to obtain a conference with other bodies interested, or which had been active, in the discussion and settlement of these several questions, the Right Honourable Baronet himself undertaking to bring forward and support such a general measure as might be agreed upon by all parties. This endeavour, the Council regret to say, has hitherto proved ineffectual, although they are not without hopes of yet coming to some satisfactory understanding with the parties interested in the settlement of this question. In reference to the Medical Registration Bill, lately before the Commons House of Parliament, the Council, deeming the leading principles of the registration and legal recognition of all existing practitioners of medicine laid down therein to be sound and equitable, felt it to be their duty, in accordance with the resolution passed at the General Meeting at Norwich, to consult the Committee there appointed on the propriety of petitioning for the principles of the bill. A petition was therefore submitted to the consideration of the members of that Committee. The bill was soon after withdrawn from the House of Commons, and the Council then thought it advisable to delay all further proceedings on the subject until they could again have the advantage of consulting a General Meeting of the Association.

POOR-LAW.

The Council have little to report connected with this subject, the state in which the entire question with respect to the re-constitution of the Poor-Law Commission has been placed, rendering it difficult to take any measures with effect for the improvement of that portion of it which concerns the Medical Profession.

PUBLIC HEALTH.

The measures in progress for improving the sanitary condition of large towns and densely peopled rural districts have been attentively watched by the Council. The entire subject has been taken up by Her Majesty's Government with energy, and the views entertained upon it are of the most comprehensive and enlightened description, and are supported by the able advocacy of an influential Association, established for the express purpose of improving the health of towns; but the Council recommend that a Committee be formed for the purpose of aiding in the suggestion of such clauses in any Bill to be brought into Parliament as may render it fully effective. The Council are also disposed to think that by the exercise of individual influence, and by diffusing accurate information among the non-professional portion of the community, through the medium of public lectures and daily intercourse, the Members of the Association can, under present circumstances, make themselves most useful in familiarizing the minds of the uninformed with the important details of the work sought to be accomplished.

BRANCHES.

In relation to the constitution of the Branches of the Association, the Council have to communicate that the recommendations of the Report on this subject made at the last Anniversary have been carried into effect in two instances. The entire county of York now forms one large and distinct Branch, from the merging of the East York into the Yorkshire Branch; and the limits proposed to be assigned to the South-Eastern and Southern Branches respectively—the former to include the counties of Kent, Surrey, and Susssex, and the latter to be restricted to Berkshire, Hampshire, Dorsetshire, and Wiltshire—have been mutually agreed upon.

BENEVOLENT FUND.

So numerous and urgent have been the claims on this Fund during the past year, that the portion of it available has been on more than one occasion exhausted, so as to cause delay in affording aid to many deserving cases. The subscriptions for the past year have not reached their usual amount. The Committee of Management will present a Report to the Association at this Meeting, when it is to be hoped an increased stimulus will be given to this admirable and useful charity.

COUNCIL FUND.

At the Meeting at Norwich it was proposed to raise a fund among the Members of the Council, for the purpose of offering prizes, and in other ways promoting scientific investigations. The appropriation of the sum collected was intrusted to a Committee then appointed, and the Council have the pleasure of stating that the measure has been so far successful as to allow of the sum of £50 being set apart and offered as a prize for the best Report "On the Cerebral Affections of Infancy." From the large number of Members now on the Council, there is reason to expect that in future years the amount collected for these purposes will be greater than it was last year, and that the Council will thus be enabled materially to assist the Association in the endeavours now making to give a higher character to the publications of the Society.

In concluding their Report, the Council cannot but indulge the hope that the time is at last approaching when the final settlement of those questions of medical polity, which have so long distracted the attention of the members of the profession, will allow them to devote their entire energies, undisturbed by agitating reflections, to the more congenial object of cultivating the medical sciences. They view, with much satisfaction, the measures which are now in progress in this Association for the attainment of this most important end; and they would indulge the hope that on the next occasion of the assembling of the Association together, the differences of opinion on medico-political subjects will have been adjusted, and that every Member of the Society will be at liberty to promote those inquiries which shall result in the advancement of genuine medical science, and the attainment of the noble objects for which medical science is cultivated—the improvement of health, the cure of disease, and the consequent alleviation of those manifold afflictions which sickness but too surely brings in its train. The Council cannot but observe that such also are the genuine objects of this Association, in the promotion of which its organization so well qualifies it to aid; and earnestly would they urge upon their fellow Members not to neglect the opportunities thus placed within their reach of fulfilling the great end of their calling, each one contributing his assistance in forwarding the truly benevolent work before him. The Association will thus best fulfil the intentions of those who have laboured in its foundation and its support, and maintain that place amongst kindred Institutions to which the number, influence, and eminence of its Members so justly entitle it.

It was moved by Mr. Douglas Fox, of Derby, seconded by Dr. Hutchinson, of Nottingham, and carried unanimously:—

"That the report of the Council now read be adopted and printed."

FINANCIAL STATEMENT.

Dr. HASTINGS then read the Financial Statement, of which the following is an analysis:—

RECEIPTS.

By Balance of last year's Account .	113	7	7
Subscriptions—1846-7	1304	1	8
Balance due to Treasurer	22	10	4½
	£1439	19	7½

EXPENDITURE.

Branch Expenses	24	10	8
Anniversary Expenses, (1846.) . .	18	16	10
Printing and Binding "Transactions"	363	19	10
Printing the *Journal* and Stamps . .	637	18	7½
To the Secretary	195	0	0
Postage, Stationary, and Incidental Expenses	26	0	11
Received in Error for Benevolent Fund	2	2	0
Balance of Dr. Green's Award . .	261	10	9
	£1439	19	7½

Moved by Mr. Crosse, of Norwich, seconded by Mr. Fearn, of Derby, and carried unanimously:—

"That Mr. Martin, of Reigate, and Mr. Soden, of Bath, be requested to act as Auditors of the Treasurer's Accounts at this meeting."

Dr. Robertson, of Northampton, then moved—

"That the Council be empowered to take such proceedings to advance the progress of Medical Reform as to them may seem necessary, and that in any case of difficulty which may arise they be requested to consult the following gentlemen:—Dr. Lyon, of Manchester; Mr. Soden, of Sunbury, (late of Bath;) Mr. Martin, of Reigate; Dr. Chambers, of Colchester; Mr. Bree, of Stowmarket; Dr. Radford, of Manchester; Mr. Norman, of Bath."

Dr. Conolly, of Cheltenham, seconded the motion, and felt convinced that the subject was being left in the hands of men well qualified to attend to so important a question.

The motion was carried unanimously.

Laws of the Association.

Mr. Soden, of Sunbury, moved the appointment of a Committee to consider the expediency of making some alterations in the laws of the Association.

Dr. Hastings, in seconding the motion, observed that it would be evident that some of the laws required revising, and that some which were necessary had been omitted, particularly in reference to the admission of members to the Association. This, however, was a matter which would require a great deal of consideration. Again, upon some occasions, members allowed their subscriptions to remain in arrear for a considerable time, which was highly detrimental to the interests of the Association, and should be provided against. There was another matter that required to be approached very delicately, but it could not on that account be left alone; it was, that if they had a member of their Association who should act in a manner derogatory to his associates, and in opposition to those ethical laws which it was so necessary should be acted up to by members of the medical profession, they had at present no means of checking him. He admited it was a delicate subject, but it appeared to him that laws for the occasion of the interference of the Association might be requisite, and he thought a line must be drawn between those members of the profession who pursued an honorable course, and those who did not do so. Some attempt should therefore be made to separate them. He begged to second the motion.

Mr. J. Johnson, of Derby, enquired whether he was to understand that the five gentlemen about to be nominated as the proposed Committee, were to inquire into the conduct of medical men belonging to the Association; because if so, he disagreed with its appointment. He admitted it was a delicate matter, and was of opinion, that in the present enlightened age, anything that was of an inquisitorial character, would not tend to raise the moral or intellectual character of the profession generally. He would sooner trust to the opinion of the public upon a man's conduct. Free trade in the profession was, as he conceived, certainly the best, and anything like protection now a-days was sure to fail.

Dr. Hastings remarked he quite agreed in Mr. Johnson's observations, but where they found a man acting derogatory to his profession and his associates, they at least should be in a position which would enable them to say to him, "Sir, your conduct is so derogatory to your profession, that we do not think we ought to have you under our banner, which has inscribed upon it, the advancement of our profession upon ethical and intellectual grounds."

Mr. Crosse, of Norwich, wished it to be understood that the Committee were merely to report at the present meeting on the expediency of making such alterations, and wished the motion to state that.

Mr. Soden thought the present discussion premature, as when the Committee brought up their report anything objectionable could be stated, and the question argued. The motion before the meeting was simply to the effect that five gentlemen be appointed a Committee to take into consideration the desirability of making alterations in the laws, and to bring the matter more fully before the meeting, by which any suggestions could be adopted or rejected.

Mr. Sibson expressed his hope that the Committee, if appointed, would not be called upon to report until the next Annual Meeting of the Association, as he was fearful that they could not give the subject that grave consideration it required in a few hours.

The President, who expressed his opinion of the desirability of the Committee being appointed, then put the motion to the meeting, when it was carried unanimously.

The following gentlemen were appointed members of the Committee:—Dr. John Conolly, of Hanwell; Mr. Soden, of Sunbury; Mr. Paget, of Leicester; Mr. Nunneley, of Leeds; and Mr. Martin, of Reigate.

Mr. Hodgson, of Birmingham, moved—"That the thanks of this meeting be given to Mr. Crosse, the retiring President, and that he be appointed a Vice-president of the Association," and in doing so observed that he was sure they should be unanimous in passing that motion, for no gentleman had evinced greater interest for the welfare of the Association, or devoted himself to the furtherence of its objects than, Mr. Crosse had done. He had known that gentleman for some years, and had with pleasure witnessed the zeal and energy displayed by him in that branch of the profession to which he was most attached. He himself was not present at the meeting at Norwich, last year, but he was convinced from what he had heard that in every respect for his services rendered at that meeting, Mr. Crosse was well worthy of the present acknowledgment.

Mr. Martin, in seconding the proposition, observed he had one advantage over Mr. Hodgson, which was that he was present at the meeting at Norwich and had an opportunity of witnessing the zeal and ability displayed by Mr. Crosse as President of the Association, and therefore most cordially seconded the motion.

The motion was carried by acclamation.

Mr. Crosse, in reply, said, I must rise to thank you for the distinguished honour you have conferred upon me by placing me upon the highest list of your associates for my life. I assure you I needed not anything of this sort to cause me to attach myself to you for the rest of my life; for I have had the advantage and the honour of being connected with this Association

for the last eleven or twelve years, and it has been both a great stimulus to my energies in the branch of the profession I am more immediately connected with, and has afforded me the highest delight, in the forming many valuable acquaintances among the members of the profession. For these advantages I feel under obligation to the Society, and ask you to receive my best thanks and hopes for the future success of the Association.

Mr. SODEN next moved "That the thanks of this meeting be given to the President of the Council, Dr. Hastings, for his continued and zealous attention to the welfare of the Association." Mr. Soden said that after having read that motion he was sure it was not necessary for him to say another word. He had the good fortune to attend the first meeting of the Association at Worcester, fifteen years ago, on the invitation of Dr. Hastings, and had continued to attend the meetings ever since, and in common with his fellow associates he had witnessed the talent, zeal, and knowledge evinced by that gentleman upon all occasions. Ever since 1832, there had been a great desire among the members of the Association that they should have an opportunity afforded them of visiting the spot where as he might say they where born, and where they were received with so much kindness and hospitality by Dr. Hastings. At their first meeting at Worcester they had as their President a gentleman who might be termed the father of his profession, Dr. Johnstone, of Birmingham, who was then in years, but he (Mr. Soden,) was glad to hear that Dr. Johnstone was still alive and well. He trusted they would excuse him, but he could not help expressing his hope that they should meet again at Worcester, under the auspices of their worthy President of the Council, Dr. Hastings.

Dr. CONOLLY, of Hanwell, said he had great gratification in seconding the motion. He had been a Member of the Association since its formation, and was of opinion no other society had had such an influence upon the medical profession as this one that had been established and mainly kept together by Dr. Hastings' exertions. During the last fifteen years, upon every occasion of the Society meeting, they had seen collected, men not only of ability and talent, but men who, in addition, possessed those virtues that gave the brightest lustre to science, and stamped them as the benefactors of their fellow men. After alluding to the beneficial results arising from the mutual interchange of ideas of Members of the Association, Dr. Conolly concluded by seconding the motion.

The resolution was carried with acclamation.

Dr. HASTINGS rose and said—Mr. President and Gentlemen,—If anything could increase my desire to use my best exertions for the prosperity of this noble Association, it is the manner in which, upon all occasions, my endeavours have been received by the Members of it; and next to the feeling that I have been anxious to do my duty to the Association, is the assurance that I reap my reward in having the respect of every Member of this Association. It is now fifteen years since this Society was formed at Worcester, and I had no idea at that time that the operations of it would be extended over the length and breadth of England. It was intended, gentlemen, when formed, not only for the benefit of the medical profession, but with a desire to benefit the whole human family. I thought, at that time, that its operations would, at the most, have been confined to the Midland Counties; but I have lived to see its principles carried out in every part of England — principles which, it is intended, should tend to the promotion of the welfare of humanity, through this profession, and it is owing to those principles that the great success of this Association is owing. My own feelings, in common with those of the profession generally at Worcester, are that we deem ourselves honoured in being associated with the birth of this noble Association, and it is a matter of pride to us that in that ancient and faithful city this Institution was formed. We have long talked over among ourselves our desire that you should once more meet at Worcester, in order that all who were interested there in the formation of this Association should see the working of it. I have in my eye now, the son of that man whom we may call the father of our profession, and who came from a distance to take the chair at the first meeting of the Association, at Worcester, and who came forward at once to further this scheme for the advancement of the profession, and I am happy that his son (Dr. James Johnstone,) is present, to hear, as you have testified, how highly you value the exertions he then made. I hope he will go back and tell his father what your opinions are, and I know that he has the respect not only of yourselves, but of the body of the profession at large. I shall not wander further, nor detain you, but I must tell you that for the last two or three years, it has been most earnestly desired that you should again come to Worcester, in order to testify to those who assisted in the formation of this Society, that what they wished to see done, has been fully carried out. Mr. Soden mentioned his wish on this subject to me, and every respectable member of the profession at Worcester, to whom I spoke of it, expressed their desire that if it were possible we should have an early meeting at Worcester. I have now in my hand a requisition, numerously signed, not only by the medical men of the city of Worcester, but of those throughout the county, inviting you to Worcester, and I can only say that every person who was applied to, signed that requisition, and expressed their earnest hope that as soon as you could you would hold your meeting there.

After reading the requisition, which was signed by 106 gentlemen, including every member of the profession resident in Worcester, Dr. Hastings, in conclusion, expressed his hope that the invitation would be accepted, and assured the meeting that the members of the medical profession in Worcester would do every thing in their power to render their visit agreeable, as became the residents of the city of the birth of the Association.

Mr. SODEN said he thought they could not do better than accept that invitation as soon as possible. They could not do so next year as they were pledged to hold their next meeting at Taunton; but he begged to move that the invitation be accepted for 1849, and

that their esteemed friend, Dr. Hastings, do preside upon that occasion.

Dr. CONOLLY, of Cheltenham, seconded the motion, which was carried unanimously.

It was moved by Mr. WATSON, of Stourport, seconded by Dr. LYON, of Manchester, and carried unanimously:

"That the thanks of this Meeting be given to the Council of the past year, and that they be requested to continue their services, with the following additional Members; and that they be empowered to add to their number:—

John Wright, Esq.,	Derby.
Douglas Fox, Esq.,	ditto.
Richard Hindle, M.D.,	Billington Retreat, Whalley,
George Daglish, Esq.,	Wigan.
Robert Brown, Esq.,	Preston.
John Beales, Esq.,	Halesworth, Suffolk.
S. W. Fearn, Esq.,	Derby.
Samuel H. Evans, Esq.,	ditto.
Henry Francis Gisborne, Esq.,	ditto.
John Jones, Esq.,	ditto.
Arthur Adye, Esq.,	Bradford, Wilts.
Charles Trinder, Esq.,	Devizes.
George Vicary, Esq.,	Warminster.
William Colborne, Esq.,	Chippenham.
George Churchill Watson, M.D.,	Liverpool.
Samuel Crompton, Esq.,	Manchester.
William Henry Duncan, M.D.,	Liverpool.
Thos. Hodgkin, M.D.,	London.
Thos. Smith, M.D.,	Cheltenham."

It was moved by Dr. RADFORD, of Manchester, and seconded by Dr. MACKNESS, of Hastings, and carried unanimously:—

"That Professor Naegele, of Heidelberg, be appointed an Honorary Corresponding Member."

Dr. BOISRAGON, of Cheltenham, moved, "That the thanks of this Meeting be given to the Secretary, Dr. Streeten, for his services during the past year;" and, in so doing, observed that the duties of Dr. Streeten, in connection with the *Journal* of the Association, combined duties not only requiring zeal and talent, but were of an onerous character, and which duties he had ably discharged. He had no doubt, now that their *Journal* was doubled in size—an arrangement of which he approved,—he had no doubt but Dr. Streeten would double his exertions in their cause.

Mr. NUNNELEY seconded the motion, but could not expect that their Secretary would be able to double his exertions, seeing how perfectly he attended to their business now.

Dr. STREETEN, in acknowledgment of the motion, assured the Association that the highest gratification he could receive was to have their approval of the manner in which he discharged the duties of the office entrusted to him. It would always be his wish to merit the kindness with which they had received him, by a due discharge of those duties, and though he might not be able to realize the expectations of his esteemed friend, Dr. Boisragon, he could assure them that it should not be from any want of zeal on his part if the duties devolving upon him were not performed to their satisfaction.

PUBLICATIONS' COMMITTEE.

Dr. HASTINGS then read two Reports from the Publications' Committee. The first report will be found published at length in the first number of the Journal for the present year. The following is the second report:—

SECOND REPORT.

At the Annual Meeting of the Association held at Norwich, in August, 1846, a Committee was appointed to inquire "Whether any, and what alteration was required in the general Publications of the Society, and to report upon the same either to the Council, or the general meeting to be held at Derby in 1847."

The Committee so appointed, divided the duties entrusted to them into two distinct branches of inquiry:—

1. As to the propriety of making any change in the form and period of publication of the Journal and Transactions.

2. As to the best means of giving the highest possible character to the literature of the Association.

Aware of the importance of giving effect to the wishes of the Association upon the first of these questions, at the commencement of a new volume of the Journal, your Committee have already reported to the Council the result of their inquiries and deliberations, and they are induced to hope from the acknowledged improvement in the Journal of the Society, which has resulted from that Report, that the recommendations which they offered were founded upon a just and sound estimate, not only of the opinions generally entertained by the Association, but of that which was most likely to give a higher tone to its literature, and advance its means of being useful to the Profession and Science of Medicine.

Your Committee are fully sensible of the difficulties which are to be encountered in creating and supporting the character of a publication which purports to be the organ of a large and influential Association; but they approach the second division of their inquiry with a firm conviction that these difficulties will easily be surmounted, if each member will consider himself (as he in reality is,) responsible for the position which the Association is expected to take among the learned and useful societies of the kingdom.

In considering the question now before them, in detail, viz:—

"The best means of giving the highest possible character to the literature of the Association," your Committee think it may be conveniently discussed under the following heads:—

I. The adoption of express measures for enlarging the scope of the Journal.

II. The appropriation of part of the funds of the Association, for the encouragement of scientific investigation among its members.

For the attainment of the first of these objects, your Committee would recommend:—

A. That some means be taken for ensuring regular and systematic communications from medical men attached to Provincial Hospitals, and from the Secretaries of the various Societies for the promotion of different branches of Physiology and Medicine, established in large Provincial Towns, and also:—

B. The appointment of an additional Editor, to preside

over the foreign department of the Journal, whose business it should be to furnish the members with a complete and current abstract of all that is going on abroad, up to the most recent date.

Your Committee have also had laid before them, valuable communications from Mr. Hunt of Herne Bay, and Mr. Crompton of Manchester, which, as containing suggestions for increasing the scope of the Journal, may be alluded to here. These gentlemen appear to have arrived at similar conclusions, without any communication with each other, or any knowledge of the views which they separately entertain.

Mr. Hunt proposes "To insert in the first instance a letter or essay in the Provincial Journal, addressed to all the members of the Association, with a view of pressing the subject upon their notice, and urging the importance of prompt and accurate replies to the queries about to be propounded to them." "I would then insert," he goes on to say "in the next number, (or append to the address,) a series of questions on some particular subject, which should admit of definite answers relating to absolute facts, occurring in the practice of the various members, requesting a reply addressed to ———— before the —— day of ————

"The subjects to be chosen for examination, should be taken from the different departments of medical practice, viz:—Medicine, Surgery, and Midwifery, giving the preference to Medicine and Materia Medica, as the subjects best adapted to this kind of inquiry, and I would confine the inquiries at present to Therapeutics, as the most neglected branch. Replies should be addressed and forwarded by post to some person appointed by the Committee, whose duty it should be first, to arrange statistically and examine the answers, rejecting such as consist of opinions in lieu of palpable facts. He should then examine the periodical publications for the previous one, seven, or fourteen years, gleaning from them facts only on the subject in hand. His duty would be then to compare these with those, and the whole with any valued treatise, or established opinion, and wind up the results in an Essay."

Mr. Hunt then proposes that some competent person, conversant with the subject should be appointed to perform these duties, and that his expenses should be paid by the Association; and he appends to his statement a form in which he suggests questions should be put, handsomely offering to superintend the working of the plan himself in the first instance.

Mr. Crompton of Manchester, proposes a plan nearly similar to the above.

Your Committee are favourable to opening the pages of the Journal to Mr. Crompton, and Mr. Hunt, for the objects they severally propose; provided that these gentlemen will kindly undertake the working of their own plans.

In the attainment of the second object into which they have divided the present inquiry, viz:—

"The encouragement of Medical Science among the members of the Association," your Committee would recommend that as much money as can be spared be set aside annually, to be bestowed in prizes for the best original investigations in the various departments of Medical Science.

They are however of opinion that two great principles ought to be laid down for the guidance of the Association, in the appropriation of the money:

I. That beyond the divisions into the several great departments of Physiology, Pathology, &c., Candidates for prizes should not be limited to a given subject.

II. That a preference be given to such investigations as develop new truths supported by scientific evidence, and as evidence of this kind, anatomical preparations, (microscopic and others,) drawings, casts, etc., may be mentioned as holding an important rank.

A proposition by Dr. Hake, of Bury St. Edmunds, to confer prizes for the best series of Reports, and the best Essay, published by the Association during the year in the Journal, is well worthy the attention of the Association.

Dr. Hake proposes that a gold medal be awarded annually to the author of the best reports published by the Association during the preceding year, and also that a gold Medal be awarded annually to the best essay on Medical Science, published during the preceding year. In either case should there be no reports nor essays deemed worthy of such award by the Council, that they should be at liberty to award the same to any reports or essays, published in any year preceding the last.

Having well considered the various communications laid before them, and with the most sincere desire to benefit the Association by the result of their inquiries, and to place the Provincial Medical and Surgical Association in a position which must reflect credit upon the zeal and ability of the Profession in the provinces, your Committee have come to the following resolutions, which they beg to offer to the attention of the Association.

1. That the most effective measnres be adopted for securing regular and systematical communications from medical men attached to Provincial Hospitals, and the Secretaries of the various societies for the promotion of different branches of Physiology and Medicine, established throughout the kingdom; such communications to consist of clinical lectures of the highest character, reports of scientific proceedings, and cases possessing great interest, which are likely to throw new light npon obscure points in practice.

2. That the members of the Association be earnestly requested to assist in procuring communications from gentlemen engaged in private practice.

3. That an additional Editor of the Journal be appointed to preside over the Foreign department.

4. That the Editor of the Journal be requested to offer every facility in giving a fair trial to the propositions of Mr. Hunt, of Herne Bay, and Mr. Crompton, of Manchester.

5. That as a means of encouraging the advancement of medical science among the members of the Association, and providing matter for insertion in the publications of the Society, a gold medal or medals be presented to the author or authors of such communications as may be deemed worthy by the Council.

Your Committee earnestly hope that whatever may be decided in the matter referred to their consideration, the Association will do its utmost as a body, to promote the cultivation of the higher departments of medical inquiry, and thereby show that it has no sympathy with those who make the "cui bono" (in the sense of immediate and obvious application to the healing art,) the one test of the value of any discovery. It is only thus we can hope to attain the high position to which such an important body should aspire, and do something towards

rescuing our profession from the degradation into which it has been brought by an opposite course.

W. Newnham.
Edmund Lyon, M.D.
C. M. Durrant, M.D.
T. H. Barker, M.D.
Peter Martin.
John S. Soden.
Thomas Radford, M.D.
James Mackness, M.D.
Charles Hastings, M.D.
John Green Crosse.
C. R. Bree, Honorary Secretary.

Dr. Hastings had no doubt they would recollect that at the last meeting at Norwich this Committee was appointed under the superintendence of Mr. Bree, of Stowmarket, who, he was sorry to say, was not present at this meeting; but, in his absence, he was enabled to say more than in his presence, and he must say that in the management of the business consigned to the Committee he deserved all that could be said in praise of the zeal and ability he had shown, and which was likely to be of great benefit to the Association at large. The Council had received several communications approving of the change in the publication of the *Provincial Medical and Surgical Journal*, a change of which he himself also much approved.

Dr. James Johnstone moved the adoption of the Reports, and said he could not but feel that the Association were deeply indebted to that Committee for their labours, and expressed his approbation of the articles that appeared in the *Journal* of the Association, and of the mode in which it was conducted.

Mr. Sibson seconded the motion, and considered that the adoption of the Reports would lead to a higher class of papers being sent to the Journal.

Dr. Streeten took the opportunity of acknowledging the valuable assistance he had received from Dr. Ranking, of Norwich, in drawing up the General Retrospect; he had thus been able to bring much interesting information before the members of the Association, it being an object to select information from Foreign journals and publications which many of them might not be likely otherwise to obtain.

The motion was then put to the meeting, and carried unanimously.

Medical Officers of Poor-law Unions.

A report of a meeting of medical officers of Poor-Law Unions and other medical men, held at Matlock Bath, on Wednesday, July 28th, was read by Mr. Cantrell. The meeting was called to take into consideration the best means of obtaining a fair remuneration for their services, and on other business, Wm. Cantrell, Esq., in the chair,

It was proposed by Mr. Tasker, of Melbourne, seconded by Mr. Lomas, of Parwich, and carried unanimously:—

That it is the opinion of this meeting that the remuneration for the important services rendered by the medical officers of Poor Law Unions, is unequal, and, in most cases, inadequate, and that the treatment which so large a body of the profession receive from Boards of Guardians and Poor-Law Commissioners, tends to lower the status of the profession generally.

Proposed by Mr. Fletcher, of Ripley, seconded by Mr. Griffin Spencer, of Alfreton, and carried unanimously:—

That it is the opinion of this meeting, that the medical department of the Poor-Law can only be carried out satisfactorily by medical men, practically acquainted with the sanitary condition of the poor, and the duties required of the medical officers, and that therefore a Medical Board or Commissioner ought to be appointed for that purpose.

Proposed by Mr. Fletcher, of Ripley, seconded by Mr. Adams, of Matlock, and carried unanimously:—

That it is the opinion of this meeting, that illegal medical practice has increased to such an extent as to demand the serious consideration of the profession with a view to its abolition; and that this would be best accomplished by the appointment of a special officer to investigate any supposed case of illegal practice of which he may receive notice, and report upon the same either to a local or general board, prossessing power to direct their prosecution.

Proposed by Mr. Walters, of Bakewell, seconded by Mr. Moore, of Tideswell, and carried unanimously:—

That Mr. Cantrell, Mr. Tasker, Mr. Spencer, Mr. Evans, Mr. Fletcher, Mr. Lomas, Mr. Allen, and Mr. Ebsworth, be deputed to represent the opinion of this meeting to the Provincial Association at their meeting at Derby in August next, and to urge the immediate consideration of the just claims of Union medical officers, who indulge the hope that the proper representation of their case by the Provincial Association would lead, under the improved management of the Poor Law, to a more liberal and adequate remuneration for their services.

Proposed by Mr. Tasker, seconded by Mr. Lomas, and carried unanimously:—

That the best thanks of this meeting be given to Mr. Cantrell for his kind exertions in calling the meeting together, and for the able manner in which he has discharged the duties of Chairman during the evening.

W. CANTRELL, Chairman.

Mr. Cantrell said he had been informed, from reading the report of the proceedings of the last meeting at Norwich, that a Committee had been appointed to wait upon the Secretary of State for the Home Department, upon the treatment received by medical officers of Poor-Law Unions, more especially a case of Mr. Martin's, and wished to know the result.

Dr. Streeten explained, that soon after the late meeting a difference of opinion had arisen in the Committee as to the course to be pursued, and in consequence of that the Committee were not able to carry out the object in view. It was not intended that the subject should drop through, but in consequence of the difference alluded to the inquiry into the circumstances of the cases brought forward had not been pursued.

Mr. Cantrell replied that he felt anxious to know what had been done, for Medical Officers of Poor-

Law Unions formed a large number of the members of the Association. The ill-usage and injustice received by them from the hands of those who by their position in life, and by their education, ought to know better, he considered should be enquired into by the Association. There are many of the profession who might be termed the "working men" of the profession. who would be glad to attend the meetings of the Association, and state their cases, but could not afford to do so, and while the Association brought together men of talent, and of the highest respectability, he would ask them not to forget those who were not so fortunately placed as to be able to urge personally the injustice they received. They wanted to see quackery put down; it might be all very well to talk about free trade in physic, supposing that the public could know which were the men to trust, but it would not do without that. He had but one child, but he should never think of bringing him up as a general practitioner if the same treatment they now received was continued. He did hope, therefore, that though the last application on the subject had been allowed to fall to the ground by the Committee, such would not be the case again. He was not speaking selfishly, for he had told the Guardians of the Union to which he was attached that he would sooner take the districts for nothing than for the sum they paid, for he could not allow a man to come into the district for the sake of the Poor-Law practice, and then walk away with the rest. Other gentlemen would urge the matter before the Association either at the present, or any other time during the sittings of the Association, which might be convenient.

The PRESIDENT expressed his opinion that the present was the more favourable time.

Mr. CANTRELL, continued that he was sure it was not necessary for him to enter very fully into the subject before that meeting. Gentlemen must be well aware that Poor-Law Guardians never employed a professional man as a lawyer without well paying him for his duties. It might be that guardians thought their medical officers a bad set of servants and not worthy of being remunerated; if they did, he could assure them they were mistaken, for no body of men attended to their duties with more punctuality and readiness than did medical gentlemen. He believed that they attended more to the wants of the poor than to their other patients, and were at all times ready to relieve them. In conclusion he would move that a Committee be appointed for inquiring into the matter he had brought forward, and for the purpose of seeing whether some means could not be adopted for the suppression of quackery. He hoped that they would report during the present meeting, and not let the matter stand over to another, as while the "grass grows the horse starves."

Mr. TASKER, of Melbourne, said it was perfectly useless to appeal to the Poor-Law Commissioners; the majority of the medical practitioners did not find fault with the letters of instruction forwarded by them, but what he blamed the Commissioners for was, that they did not see that guardians carried out those instructions. During the last year he had 462 union cases of illness, for which he ought to have received £150, but only received one fifth part, £30. Finding that £30 a poor sum for the assistance given, he (Mr. Tasker,) wrote to the Poor-Law Commissioners, shewing their inconsistency in allowing him to be paid in that manner by the Guardians, and in a few days he received a letter, stating that the Commissioners sanctioned the conduct of the Guardians. He accordingly went up to Somerset House, and saw one of the head clerks, but could obtain no redress. He thought that the representation of individual cases would be of no avail, but as the medical officers of unions were a large class of the profession, they ought to join together and represent their case generally to the Commissioners. To do this they ought to obtain a return from every union in the country, the number of the population, the class of people, and the amount of salary paid to the medical man. That there was a great difference in their remuneration he knew, for he had lately received a letter from a medical officer to an union, who was paid five times more than he himself was paid. He called upon the Association generally to come forward and take the matter into their consideration, and while he agreed with Dr. Hasting, that there should be a Committee appointed to inquire into the alteration of the laws by which the character and dignity of the profession should be upheld, he must call upon those who were not connected with unions to come forward and support those who were, and who looked up to them for assistance as brothers in the same profession.

Dr. HASTINGS rose and said,—Mr. President and Gentlemen—Upon all occasions of our meeting, this Association has sought to sympathize with and relieve the medical officers under the Poor-Law, from the grievances under which they labour. At every meeting a Committee has been appointed to inquire into this subject; and I feel assured from the exertions of those Committees, much good has been done, especially with the Commissioners, in London. At the last meeting a Committee was appointed to inquire into this subject, but I am sorry to say that that Committee has failed in its object, not from any defect on our part; but of those gentlemen so appointed, some of them refused to act, and those too who had been the most active and zealous on former occasions. My own impression is that the Committee gave up in despair, as they wrote to the Central Council, stating they declined to act in the matter. I wish to say that it was not through the Council, for we had nothing to do with the failure of the Committee. It fell to pieces of its own accord, as I believe from a feeling that they could not do anything more to further this great object. That is no reason why we should give up our exertions this year; the difficulties of the subject are no reason why it should be given up altogether; and if the zeal and intelligence of the gentlemen who have now addressed you be devoted to it, I cannot but think that some success will result. There is now a growing feeling that something ought to be done to ensure a better system of medical relief to the poor, and therefore I believe that if, as an Association, you will go on and

persevere in the matter, we shall see some good follow our exertions, and something done for the ill-used gentlemen belonging to our profession. I most cordially support the motion for a Committee, and hope that they will report during the present meeting.

Dr. CONOLLY, of Hanwell, supported the proposition, and said it was quite impossible that any gentleman could have listened to the eloquence with which the subjects had been urged without being impressed with its importance. Every one must be aware that there was now scarcely a village in the country where the inhabitants could not call in aid a man of talent and ability, by the exercise of which a century ago he would have been enabled to attain wealth and competence, while now he could scarce obtain a living. He (Dr. Conolly) had been a practising physician for many years, and he quite agreed that all the pleasure and delight that they experienced in meetings like the present, would be but imperfect if they left out of their consideration the welfare of the large class who were the ill-used members of the medical profession. He did hope something would be done for their benefit, for though Poor-Law Commissioners might not be answerable to them, there was a power superior to theirs,—the power of public opinion; and should the Commissioners still remain regardless of public men as their servants, the profession must send a deputation to the Secretary of State, and at the same time urge upon the members of Parliament connected with them, the importance of the subject, which he hoped would not ultimately be lost sight of.

Dr. HUTCHINSON, of Nottingham, said he was opinion that expressions of sympathy and regret were not all that could be done for that branch of their profession connected with the system of medical practice in Union districts, nor when they had uttered those expressions had they performed their duty. Dr. Hastings had proposed that a Committee should be appointed, but it appeared to him, (Dr. Hutchinson,) that Committees were very fragile things, and that they are not adequate for the necessities of the case, as was known by experience. He would rather say that a remonstrance from the Association should be forwarded to the proper quarter, which remonstrance, coming from the associated body, would have more weight than coming from a Committee, and would have another advantage, that being made a portion of the business of the Association, the matter was not likely to fade away. In conclusion he would remark, that it was a matter of equal importance to the poor man as to the medical man, and was, therefore, well deserving of their serious consideration.

Mr. JOHNSON, of Derby, expressed himself in favour of a remonstrance, and asked what more could be done by a Committee than had been done by former Committees. He was a Poor-Law doctor, and *very poor* pay he could assure them resulted from it, but the present system was worse for the poor man than for the doctor; and if medical men were but to carry out strictly the regulations of the Commissioners, it would be found so. But the profession did not do that, they felt they had a great weight of responsibility attached to their office, and they felt that the highest point of their duty was the relief of their fellow-men. The medical men were not required to attend at once upon being called on but might say to the poor man, get an order from the Poor-Law Guardians, to whom he might have to travel three or four miles. Medical men could not send poor patients that distance. If they were taken ill, and a medical man did not go and attend upon notice of illness, would he not be thought a cold-blooded, a heartless man? And therefore, in conclusion, he would urge upon them the necessity of endeavouring to relieve the medical man from such a situation.

Mr. RICE, of Stratford-upon-Avon, said he was in possession of plenty of infornation to show that the medical men referred to were but ill paid, while they had most arduous duties to perform, and remarked upon the great disparity in the payment of the medical officers of different unions.

Dr. HASTINGS thought it would be advisable to appoint a Committee to draw up a remonstrance. He had always considered the Union medical officers were well entitled to all the consideration that the Association could give to their case, believing as he did that in the discharge of their duties they had done more to keep up the honour of the profession than any other class, when the zeal and assiduity with which they discharged their duties were taken into consideration, and the small remuneration they received for their endeavours to relieve the poor man from his bodily sufferings, and therefore the Association should do all in its power to assist them in obtaining their rights from the Poor Law Commissioners.

Dr. HODGKIN, of London, said he was quite convinced that the Poor Law Commissioners had made a very sad mistake in the mode of supplying the poor with medical attendance and relief. He could not but think that a remonstrance from the Association would have great weight with the Commissioners, and should wish that the meeting would appoint a Committee to draw up a remonstrance, which he would advise should set forth their grievances, but be of a temperate character.

Mr. JOHNSON urged upon the Members of the Association the necessity of endeavouring to obtain the support of Members of Parliament in their own immediate vicinity, or with whom they were acquainted; and, he thought, also, if the matter was followed up in the columns of the *Provincial Medical and Surgical Journal*, and made public thereby, it would be attended with good results.

Dr. STREETEN assured the meeting that he should be happy to promote the objects they had in view as far as he could, as he conceived nothing could be more detrimental to the interests of the profession than that a large body of its members should have to give up their talents and time, as they were now called upon to do; and that nothing could be more injurious to those principles of general benevolence they delighted to acknowledge and to act upon, than the manner in which the professson was treated by the Poor-Law authorities.

Mr. NUNNELEY, of Leeds, wished the Association

not to expect to derive too much benefit from their remonstrance, as so long as men accepted from necessity —and he did not blame them for so doing—the salaries offered, he thought they would find that the evil was one which they could not remedy, and would be beyond their interference.

Mr. Sibson, of Nottingham, wished that medical officers were better remunerated, for the reason that the poor in many parts thought that medical officers would not treat them with due attention because they were so ill paid for doing so; and that also such a course would prevent their being pestered by the harpies of the profession.

Mr. Douglas Fox, of Derby, was sure that the public would go with the medical profession, and be glad to see their grievances redressed. He could not help thinking that the remonstrances of the Association would cause them to be heard where they had not been recognized before; as they must recollect that if in future one of the Commissioners of the Poor-Law should take his seat in the House of Commons any questions could there be asked of him, without the routine required formerly; and he had no doubt that if any member asked for a return of the state of the medical profession as connected with the operation of the Poor-Law, it would be the means of having laid before the public more information on the subject than ever before had been presented to them.

Mr. Smith, of Southam, spoke in favour of self-supporting Dispensaries, as tending to diminish the control of Poor-Law Guardians over the medical profession, which if carried out by the members of the latter in an united body, would, he considered, be of great service. He would pledge himself to shew, that though self-supporting Dispensaries had been considered derogatory to the profession, and had been called "medical clubs," they were, in fact, advantageous and reputable, if properly conducted. For thirty years his object had been to uphold the honour and respectability of the medical profession, but as to any good resulting from remonstrances he was of opinion that the Guardians would take advantage of any man who would take the proffered amount of salary.

Dr. Boisragon, of Cheltenham, remarked that it being past the hour fixed for the termination of the First General Meeting, and the subjects under consideration being of such importance, he would ask if it would not be better to adjourn the question until the evening meeting of the Association; and thought that it would be better to face the Commissioners in their den, and tell them that the men who acted as they had done would lose the confidence of the public and those whom they were appointed to protect.

The President considered that if they remonstrated time after time, they would at length be heard, especially if a Commissioner had a seat in the House of Commons.

A Committee, consisting of the following gentlemen, was then appointed, to take the matter into consideration:—Dr. Hodgkin, Dr. Hutchinson, Mr. Eddison, Mr. Sibson, Mr. Borough, Mr. Martin, Mr. Tasker, and Mr. Price.

The Association then adjourned.

SECOND GENERAL MEETING.

At eight o'clock in the evening the members again met in the Town Hall, when, the President having taken his seat, Dr. W. Conolly, of Cheltenham, read the following report of the Benevolent Fund:—

Report of the Benevolent Fund—1847.

The Central Committee of Management of the Benevolent Fund regret to have to report to the Association that the contributions to this valuable charity have not increased as they had anticipated would have been the case. This may be attributed to various concurring causes. The universal scarcity and distress that has prevailed during the past year have caused immense sums of money to be given by all classes of the community, to relieve the immediate and urgent wants of our suffering fellow-creatures, pestilence and famine admitting of no delay; thus, what might have been appropriated to charities of a more limited nature, has been devoted to the relief of the general and more urgent national distress. The medical community have not been backward in taking their share of the good work, and thus diminishing their power of contributing with their usual liberality to the wants of the members of their own profession. Amid the pressure of this universal calamity, it was not to be expected but that the medical world would be partakers; accordingly, the applications to the Committee for aid during the past year have been unusually numerous and urgent. They have given relief to the extent of their means, insomuch that at one period of the year the available Fund was quite exhausted, and some months elapsed before they were able to renew their grants.

Notwithstanding, however, the untoward circumstances above-mentioned, seventeen cases have been relieved in the course of the last twelve months, all of them of a distressing and urgent kind; and small as the sums appropriated to each case have been, the Committee have every reason to believe that the relief has been most seasonable, and has in every case been acknowledged with the deepest gratitude. Could the Association generally but read the heart-rending appeals that are made to the Committee by most respectable members of the profession and their families, or the grateful expression of acknowledgment with which their bounty, when accorded, is received, their gratification would be extreme, and their thankfulness unbounded, that a kind Providence had enabled them to contribute to so noble and so useful a charity. One gentleman who had been the means of obtaining from the Committee a donation annually for the last three or four years, for the orphan daughter of a respectable practitioner, in the course of the last year writes to the Committee—"You will be interested to hear that poor Miss ———, whose necessities you have so materially relieved, will be no longer a claimant upon the bounty of the Fund; after long and severe suffering, an attack of pneumonia last autumn soon carried her off. I am sure you will be gratified at hearing that the aid afforded by our Benevolent Fund very materially added to her comfort, and spared her very many of those privations which she must otherwise have suffered from." The Committee have the gratification of adding that this gentleman, thus witnessing the practical benefits of the charity, has this

year doubled his subscription to the Fund. The Committee feel that it is unnecessary to say more in order to recommend this charity to the attention of the Association; they feel confident it is unnecessary, it speaks for itself, and cannot fail to receive the support of every individual member, according to the means of doing so, with which he may be blessed.

In consequence of the Honorary Secretary and Treasurer, who has held those offices for twelve years, viz.,—since the formation of the fund, from the state of his health and other causes, and feeling that he is no longer able to exert himself with the requisite zeal and activity in behalf of the Charity, being desirous for some time past to resign his functions, the Committee have great satisfaction and pleasure in stating that that able and zealous friend and advocate of the Benevolent Fund, Mr. Newnham has been induced to accept the offices of Secretary and Treasurer, and they entertain the most sanguine hope that with his powerful aid, and their own unremitted attention to the objects of the Charity, it will continue to flourish and be a lasting memorial of the usefulness of the Provincial Medical and Surgical Association.

JOHN BARON, M.D., President, Cheltenham.
WILLIAM CONOLLY, M.D., Hon. Sec. and Treasurer, Castleton House, Cheltenham.

Financial Statement for the Year ending June 30, 1847.

DONATION FUND.

	£.	s.	d.
Balance in hand, July 1st, 1846	874	4	11
Donations received from July 1, 1846, to June 30, 1847, inclusive	21	15	6
Interest for the year	24	6	2
Total	£920	6	7

SUBSCRIPTION FUND.

	£.	s.	d.			
Balance in hand, July 1, 1846				45	18	5
Subscriptions received from July 1, 1846, to June 30, 1847, inclusive				151	11	3
Total				197	9	8
Disbursed—						
In Benevolent Aid....	155	0	0			
Stationery	0	5	0	169	4	3
Postage and Carriage	0	12	3			
Printers' Bill.....	13	7	0			
Balance in hand.....				£28	5	5

Mr. NEWNHAM, of Farnham, then moved, "That the Report now read be received and adopted, and that the thanks of the Association be given to the Managing Committee for their exertions in carrying into effect this important branch of the Association." He expressed his inability to convey an idea of the amount of thanks that were due to the retiring Secretary and Treasurer of the Benevolent Fund for the exertions that had been used. The report then presented offered matter of deep importance, and such as he trusted would meet with the attention of all present. It was a subject which demanded the heart-felt energy and power of all who were interested in the welfare of the profession, and who wished to help those who had no means of keeping their families from wretchedness. Mr. Newnham at some length shewed the comparative state of the funds as compared with former years, and urged upon the members of the Association the vast amount of good they would be conferring upon the profession at large by contributing to the Benevolent Fund.

Mr. HATTON, of Manchester, said he most cordially seconded the reception and adoption of the Report.

The resolution was carried unanimously.

Mr. WRIGHT, of Derby, moved, "That the cordial thanks of this Meeting be given to Dr. Conolly, of Cheltenham, for his unwearied and able management of the Benevolent Fund, from its commencement to the present time."

Dr. HODGKIN, of London, seconded the motion, and remarked, that not only had there been some pleasure, but he felt assured there had been much labour incurred in the business of the Benevolent Fund. He therefore most cordially seconded the resolution, and regretted that the Fund was so small; he would suggest, that parties who were not members of the profession or Association, might be induced to assist in such a work of charity as that before their consideration.

The PRESIDENT having put the motion, it was carried unanimously.

Dr. WILLIAM CONOLLY thanked the meeting most cordially for the kind manner in which they had passed their last resolution, and assured them that it had been one of the greatest pleasures of his life to have been connected with a fund having for its object the relief of the distressed members of the medical profession. At the foundation of the Society he received a letter from the founder, (Dr. Hastings,) and consented to join it; and he then took the opportunity of saying, that if a Benevolent Fund was attached to the Association, it would be the means of doing much good; it was not, however, thought advisable to establish one at that time. His friend, Dr. Baron, of Cheltenham, however, bore the subject in mind, brought it forward at Bristol, and carried a resolution for its establishment at Oxford. He (Dr. Conolly,) then took office for a time, but now he must beg to resign it, having found that during the last two years his health had not been so good as formerly, and he had found it necessary to give up the management of the fund to some one with better health, if not more zealous in their cause. He could not find any one in his own immediate neighbourhood who would undertake the office; but Mr. Newnham, of Farnham, had kindly undertaken its duties, and it was a great gratification to him to know that those duties were being placed in the hands of one every way capable of discharging them, and in whom he had the most perfect confidence. He hoped the Association would go forward, and by its Benevolent Fund, do more and more good; and he could assure them, was it not contrary to their rules, if he was to shew them the letters he had received from those who had partaken of their bounty, they would be well pleased with the result of their benevolence. In conclusion, he would say that he did hope that every member would give a small sum annually to the

Benevolent Fund; and as there was now near 2,000 members, if they would only give five shillings per annum each, a deal of good might be done by means of their benevolence. The Benevolent Fund of their Association, as had been remarked by Mr. Newnham, was unlike any other, for it was not necessary that the recipients should have been contributors to the fund, but only that the man who applied (or his successors, if he be dead,) should have belonged to the profession, be in want, and deserving of relief. In conclusion, he begged to thank them for the kindness displayed towards him, and that he had ever received at their hands; and to assure them that he should always have at heart the interests of the Association, and more especially should he have at heart the welfare of the Benevolent Fund, and a hope that it might be the means of doing much good.

It was moved by Dr. CONOLLY, of Cheltenham, seconded by Dr. PAXTON, of Rugby, and carried unanimously:—

"That Mr. Newnham, of Farnham, be requsted to accept the office of Secretary and Treasurer to the Benevolent Fund."

Mr. NEWNHAM, in accepting the office, said he only wished that he might be found to possess one-half of the zeal, energy, and ability, of the gentleman (Dr. W. Conolly,) who for many years had undertaken the duties of the office; and assured them that he would do all in his power to further the interests of the profession by means of the Benevolent Fund. He held in his hand a plaster box, on which was engraved,

"*Misere succurere disco*,"

a motto he would ask them to consider, and in conclusion he would assure them they should not find him striking his colours, but he would do all he could to to promote the welfare of the Association.

GENERAL MEDICAL ANNUITY FUND.

Dr. STREETEN then read the following letter, received by him from Mr. Daniell, of Newport Pagnell:

Mr. President and Gentlemen,—

As I find it impossible to give my personal attendance at the forthcoming Anniversary of the Provincial Medical and Surgical Association, and as I believe it due to the members of that important body that they should at least hear from me, I have determined upon communicating what I have to say through your excellent Secretary, who I doubt not will oblige me by reading this letter.

The General Medical Annuity Fund was designed, as you are aware, to become part and parcel of your Association, and up to the Anniversary Meeting held at Norwich last year, I and my colleagues considered ourselves acting under its immediate auspices. From, however, what I think was a mistaken view, it was thought by some of your leading members to be likely, in the event of its ultimate success, to interfere with, if not destroy, the Benevolent Fund of the Association. Such a result I neither anticipated nor desired, for in the language of one of the ornaments of your Association, "The two funds were intended to run together, like the fore and hind wheels of a carriage, ever travelling in unison, and never tripping each other up."

I was not inclined to controvert the question at Norwich, nor to take up the time of the Association by too freely obtruding myself or my opinions; I therefore bowed to the decision, separated at once my project from any connection with the Association, and determined to exert every energy I possessed, and at every sacrifice, to try our establishment free from the fetters of any institution. I consider that I have been eminently successful in this attempt, that congenial spirits have been found in the profession who have nobly seconded my views, and I have the proud satisfaction to announce, that "The General Medical Annuity Fund" is becoming every day an object of interest and sympathy with some of the best and most intelligent members of our beneficent calling.

Gentlemen, I entreat you to consider the value of one general Institution over a number of isolated and detached Societies. I cannot do better than refer to your own Association, having a parent trunk, and many branches, whether the general interest of the profession is not thereby advanced, much more than it could be were every county in England to possess separate and distinct little Associations. Again, I will call your attention to the power and influence exercised by the Art Union of London, in diffusing a love of the arts throughout the length and breadth of the land, and whether the amount of good would be equal were this vast Society split into innumerable divisions, each occupying a limited space. That there is a needs-be for the establishment of a co-operative institution of the character which I have proposed is manifest enough, if gentlemen will take the trouble to inquire into the vast amount of misery and destitution amongst the families of once-distinguished worthies of our profession. Let them look to the lamentable death of Mr. Walker, of Manchester,—a man eminently qualified to adorn and dignify his profession, not only by his acquirements, but by an amiability of character to which his brother-practitioners in the same town bear such ample testimony. If this case were an isolated one, it might pass over without your regard; but since I have been engaged in the great and glorious object of the establishment of a general institution for destitute widows and orphans of the profession, I have received communications from distinguished members of your Association, full of details of distress, at which the heart bleeds, if a particle of human sympathy can be found within it.

I shall send for distribution amongst the members meeting at Derby, a prospectus of our infant Society, and you will perceive by it that although infantine, it evinces the marks of promising strength and activity; that ere long it will grow into manly vigour, and spread abroad its bountiful influences to the comfort and satisfaction of many a bereaved bosom, which would otherwise pine in wretchedness and misery. I therefore earnestly, and with prayer to Almighty God, entreat the members of the Association to ponder well my frequent and earnest appeals, and implore them to gather around the standard we have erected; that by our combined energy an institution may spring up

which shall remove the stigma of apathy and neglect of our own household, and that when we die we may have the soothing satisfaction in our last moments of saying—"We have at least left the profession better than we found it."

I have the honour to be, Gentlemen,
Your obliged servant,
EDWARD DANIELL.

Newport Pagnell, July 28, 1847,

COMMITTEE ON SANATORY REGULATIONS.

The following gentlemen were appointed a Committee to watch the progress of any sanatory measures which might be brought forward in the next session of Parliament:—Dr. John Conolly, Hanwell; Dr. Soulby, Dover; Dr. Duncan, Liverpool; Dr. Hodgkin, London; Mr. Nunneley, Leeds; Mr. Soden, Sunbury.

THE ADDRESS IN SURGERY.

Mr. WALSH, of Worcester, then read the Address in Surgery, "On the Inhalation of Sulphuric Æther."

Mr. CROSSE proposed a vote of thanks to Mr. Walsh for his highly valuable address, accompanied by a request that he would allow it to be printed. In doing so, Mr. Crosse observed that the subject of this address was one of deep importance and of great novelty. The practice was peculiarly adapted for use in reducing dislocation, as he himself could speak to from having twice applied it successfully within the last few weeks in the reduction of dislocations of the hip; and where the muscular power of the patient was against the surgical operator, he conceived its use to be invaluable. With regard to the general merits of the use of æther, he did not know but that professional men would eventually settle down to more quiet opinions than were now entertained by some of them; but where they wanted to disarm a patient of his antagonism, he thought its employment quite consistent, if properly applied, and with due caution. No doubt some discussion must arise among the profession before they arrived at a sound conclusion, but he hoped it would be eventually attained.

Mr. POYSER, of Wirksworth, seconded the motion, which was carried unanimously.

COMMUNICATIONS.

Mr. SIBSON, of Nottingham, introduced, and explained the mode of using a mouth-piece, or rather mask, for an æther-inhaling apparatus, invented by himself, and which, by allowing the vapour to be breathed in a more natural manner through the nostrils, and effectually closing the mouth, was pronounced to be of a most efficient description.

Mr. WHITEHEAD, of Manchester, read a paper on *Purulent Ophthalmia in Infants.*

Mr. HIGGINBOTTOM, of Nottingham, read a paper "On the Use of the Nitrate of Silver in Erysipelas."

[These papers will be published in a future number of the Journal.]

THIRD GENERAL MEETING.

At 12 o'clock the members again assembled in the Town Hall, when the President, having taken his seat,

Dr. STREETEN read the following notice from the Committee, appointed on the previous day, to take into consideration the necessity of making some alterations in the existing laws of the Association:—

The Committee recommend that notice be given of their intention to propose, at the next Annual Meeting, that alterations be made in the laws, to enable the Association to remove the names of such Members as may be proved to have been guilty of unprofessional conduct; and also to publish the amount of arrears of subscriptions, and the names of those members whose subscriptions remain unpaid longer than one year after they become due.

J. CONOLLY.
JOHN S. SODEN.
THOMAS PAGET.
THOMAS MARTIN.
THOMAS NUNNELEY.

The recommendation of the Committee was received.

UNION MEDICAL OFFICERS.

The Committee appointed to take into consideration the treatment experienced by medical officers of Poor-Law Unions, made the following report:—

The Committee appointed to prepare the draft of a remonstrance on the subject of the grievance affecting medical officers under the Poor-Law has agreed to the following sketch:—

W. CANTRELL,
Chairman of the Committee.

To the Right Honourable Sir George Grey, Bart., her Majesty's Principal Secretary of State for the Home Department.

SIR—The attention of the Provincial Medical and Surgical Association, at its meeting at Derby, has been seriously called to the hardships to which many members of the medical profession are subjected in various parts of the kingdom by the operation of the system adopted for the appointment and remuneration of medical officers under the Poor-Law. The President and members, after mature deliberation, concluded to offer to you a respectful remonstrance on the subject; and to beg that you will obtain returns in relation to medical and surgical service, and remuneration, from the several Unions in the kingdom, and that you will cause to be made such regulations, founded on the information so obtained, as may correct the evils complained of, and have at the same time a due regard to the exigencies of the poor, and to the population, extent, and available resources of the respective districts.

It was then resolved unanimously, that the President of the Association, together with the members of the Committee, should form a deputation for the purpose of waiting upon the Secretary of State, with the proposed remonstrance, and that the Members for the Borough and County of Derby should be invited to accompany such deputation.

THE ADDRESS IN MEDICINE.

The Address in Medicine, written by Dr. Shearman, of Rotherham, was entitled—"A Retrospective Sketch

of the Advances made in the Detection and Treatment of some of the Principal Diseases of the Chest; with a glance at the Changes observed in the Secretions during their Course." The Address was illustrated with numerous drawings and diagrams, and was read by Mr. Charles James Shearman, A.B., the son of the writer.

Dr. ROBERTSON, at the conclusion of the Address, said that it was a paper of great practical value, as forming a real synopsis of some of the most dangerous diseases of the chest. He had, therefore, great pleasure in moving a vote of thanks to Dr. Shearman for his Address, with a request that he allow the same to be printed. Eloquent it really was, but the attention it deserved on that ground had been swallowed up in the importance of the matter it contained. Having read the motion before the meeting, Dr. Robertson resumed his seat.

Dr. RANKING, of Norwich, seconded the motion, and said, that having occupied the same situation as Dr. Shearman on a former occasion, he knew the care and attention requisite in producing such papers. He accorded with all that had been said of the value of the Address, and hoped that Dr. Shearman would allow it to be published.

Dr. SHEARMAN said it was, they must know, almost impossible to write a treatise upon any disease without being a little prosy, but he feared his paper had been very much so. He thanked them for the kind expressions of their feeling, and felt honoured by having been asked to allow it to be printed, to which he would consent.

Mr. PAGET, of Leicester, in reference to one of the subjects referred to in the address of Dr. Shearman, (laringysmus stridulus,) said he agreed to a great extent with Dr. Marshall Hall. He had treated this disease in children where the great object was to allay the irritation of the nervous system, by the administering of opium, and the practice had been attended with very successful results. They knew that the constitutions of children were diversified, so much so that some children could take five minims of Tincture of Opium with less effect than would be produced in others by one minim. His usual habit was to try them with two minims at night first, and if that did not do, then two minims night and morning, increased up to five minims if necessary, and he could assure the Association that such a course had been attended with much benefit. He hoped to hear that some other members of the profession present had known and acted upon the same principle.

Dr. CHAMBERS spoke of the use of opium in allaying irritability of the nervous system.

Mr. S. SMITH, of Leeds, thought one or two drops of laudanum administered to a child of tender age might prove fatal. The first example he had had of its operation on children was in a case where in a two-ounce mixture there was one drachm of laudanum contained, one drachm of which mixture was to be administered in gruel, for the relief of stone in the bladder; but though the laudanum was taken in that small quantity, *coma* was produced, and for several hours there was great danger, and since then he had not administered one drop of laudanum to a child under two years of age.

COMMUNICATIONS, &c.

Mr. SIBSON, of Nottingham, produced and exhibited a newly-invented instrument, for the purpose of ascertaining the comparative movements of the chest in respiration. The instrument, which was of simple construction, consisted of a dial-plate, on which were indicated degrees of the one-hundredth part of an inch, attached to which was a rack and pinion; as the rack rose, by the expansion of the chest, the pinion, which ran through, communicated with the indicator, which showed upon the dial-plate the number of degrees the chest rose, and the rack was returned by means of a spring. If the instrument was held steadily on the chest, it would show the precise amount of its expansion. Where he had the privilege, as he had at the hospital to which he was attached, he preferred his patients should be in bed to test the chest, though it could be done without, as the instrument would show the workings of the chest when a person was either sitting or standing. If he had any of the gentlemen he was then addressing with him at the bedside of a patient they would delight in the accuracy of the working of the instrument. He was first assisted in the design of it by an operative, who was a patient in the hospital at Nottingham; but the perfect instrument which he was then shewing them, was made by Mr. Simmonds, an eminent watchmaker of London, to whom great credit was due for the accuracy of its construction. With regard to the movements of the chest in health and disease, he would remark that out of ten patients who supposed themselves to be suffering from disease in the chest, in nine of them perhaps it was nothing of the sort, and with the assistance of that little instrument, or the spirometer of Dr. Hutchinson, which had been exhibited to them by Dr. Shearman, they could send their patients home with the pleasing fact upon their minds that they were healthy men. Mr. Sibson then went on to show that, by the instrument before the meeting, he could more accurately trace the seat of the disease in the chest, and ascertain whether the disease was seated in the upper or lower lobe of the lungs, or any part of them, as the instrument indicated the contraction and expansion caused by expiration and inspiration, and would also show the movement of the abdomen. In healthy subjects the times of inspiration and expiration were generally the same, though in many subjects there would be a pause at the conclusion of inspiration. Mr. Sibson then exemplified the working of the instrument, the accuracy of which was fully acknowledged, on his own chest, and explained that a difference of three degrees in the movement of one side of the chest as compared with the other, when indicated by the instrument, was sufficient to cause attention to be turned towards it, though it did not necessarily follow that where there was such difference, the lungs might be diseased, as abscess of the ribs, or any disease or injury of them, might cause one side of the chest to move less liberally than the other; so that they must not always conclude that the lungs were affected

when they discovered this difference, as in one instance he knew, it had been caused by a diseased shoulder. He compared the instrument to a pigmy spirometer, capable of being carried in the pocket of a medical man, who, when he had to travel upon horseback, could not carry with him the valuable instrument of Mr. Hutchinson.

An improved tube, used in laryngotomy, was also exhibited by Mr. Sibson; and a simple and novel construction to supersede artificial inspiration by means of bellows, in cases of drowning, &c. The latter consisted of a piece of flat flexible metal, with a handle at the back, and covered on the face of it with a newly-discovered adhesive composition; this being placed on the chest and gently drawn upwards, and compressed downwards, so as to carry the walls of the chest with it, would, he thought, supersede the use of the bellows in many cases. At the same time he must deprecate the pressure upon the bowels used in cases of drowning or poisoning sometimes, as he had frequently found from *post-mortem* examinations such pressure was highly injurious.

Mr. Yelverton Bosquet sent for exhibition specimens of his Hydroid Alkalies, some of which had been made for three years.

Mr. Wright, of Derby, introduced a man who had been cured of a compound dislocation of the ankle joint, and who stated that he had lately walked forty miles in one day, and found no inconvenience from the ankle that had been fractured. The cure was pronounced to have been most perfectly effected.

Dr. Paxton read an interesting paper on the Existence of free Carbon in the Human Body, and illustrated his subject by a series of specimens and drawings.

Dr. Gill, of Nottingham, read a paper on a new and successful mode of Treatment in cases of Fever.

Mr. John Jones, of Derby, read a paper on Placenta Prævia.

Mr. Hare, of London, laid before the meeting a quantity of spiculæ of carious bone, thirty-two in number, from the spine, which had been expectorated through the medium of the lungs.

The case was that of a young lady, aged thirteen years and a half, who came under his treatment for caries, and very considerable angular projection of the spine—the disease affecting the whole of the dorsal vertebræ, but especially the fifth, sixth, seventh, eighth, and ninth. She had expectorated similar spiculæ at intervals of a few days or a week for nearly two years, their discharge being accompanied with a severe irritating cough. The patient had returned home quite cured, her general health being excellent, and the deformity exceedingly improved by treatment. She has not expectorated any more portions of carious bone since June, 1846.

Two drawings of the case were exhibited, and it was likewise illustrated by a specimen of caries of the vertebræ, in which the diseased portion was surrounded by the coats of an abscess, which had contained a quantity of puriform matter.

Mr. Hare then gave the history of the case of a young man, aged twenty, who had laboured under extreme excurvation of the spine from childhood, which appeared to date from a severe attack of measles. The deformity was so extensive as to include all but the two first cervical and the three lower lumbar vertebræ; it projected backwards so much, that the diameter from the sternum to the most prominent part of the deformity, amounted to 11¼ inches, while the diameter from the right scapula to the sternum, was only 6⅛ inches. The spine was so twisted, likewise, that the bodies of the dorsal vertebræ looked outwards to the left, and their spinous processes inclined inwards to the right; the ribs of the left side, therefore, were attached to the vertebræ, at what, in their altered position, was their posterior surface, so that they assisted very materially to increase the size of the projection, forming, indeed, by the acute bend at their angles, a ridge which projected farther back than the vertebræ themselves, and for which, on a hasty inspection, this ridge might have been mistaken. The length, from the nape of the neck to the lower lumbar vertebræ, was only 11⅛ inches. Two casts were exhibtted, the one representing the case as it was when first seen; the other showing the effects of treatment.

Mr. Lloyd, of Llangefin, was about to read a paper on placenta prævia, but would not do so after the elaborate communication of Mr. Jones,; he, however, mentioned a case in which life had been lost by the ignorant treatment pursued by a non-professional man, the particulars of which will be given on another occasion.

Mr. W. Jackson, of Sheffield, regretted that midwifery was more neglected than any other branch of their professional practice, but he hoped that the time was coming when more attention would be paid to it. It was, he considered, a disgrace to this country, that a case like that mentioned to them by Mr. Lloyd should have occurred. With respect to the paper read by Mr. Jones, he thought they had not yet had sufficient experience of Dr. Simpson's plan to pronounce correctly an opinion of whether it was right or wrong, and thought at the present moment they could not decide upon that point of practice. They must wait to see the effect patiently, and if every gentleman present would but record the cases in which a failure occurred by the adoption of the plan proposed, it would enable them to form a good judgment of the propriety of bringing Dr. Simpson's plan into general use.

Mr. Fearn, of Derby, read a case of Wound of the Internal Carotid Artery, and Division of the Par Vagum, in which the Common Carotid was tried.

Dr. Hastings, at the conclusion of Mr. Fearn's paper said he was struck with the similarity of the appearances presented on a *post-mortem* examination of that gentleman's patient, with the results of his own experiments on rabbits, in which he had divided the *par vagum*, as was the case in Mr. Fearn's patient, and noticed the same peculiarity.

A series of beautiful drawings, illustrative of the

human eye in health and disease, was presented for examination by Mr. W. W. Cooper, of London.

Mr. Douglas Fox, of Derby, detailed to the Association the advantages of the elastic vulcanized India rubber plaster, spread with the prepared caoutchouc, which would be found to be of great service in cases where the parties had had to lay in bed for a considerable period; this plaster being elastic, would not be found so inconvenient for the patient as that commonly in use.

Mr. Fox also recommended the "*lunar caustic*" matches which might be prepared in a moment by a medical man from the material, and always kept clean.

The following communications were also announced to the meeting:—

"Cases of Malignant Puerperal Fever with Observations," by Dr. G. B. Clarke, of Colchester.

"A Severe Case of Spasm, probably arising from breathing and swallowing the dried particles of the Pea-Blight," by Mr. Daniell, of Newport Pagnell.

Dr. Hastings then rose and said—Mr. President and Gentlemen,—As this deliberative and instructive session is now drawing to a close, it would be a sad mistake if we did not make some provision for a similar happy meeting next year, of the Provincial Medical and Surgical Association. I may mention that we have been asked to meet in a locality singularly adapted for us, as it is near the line of the Great Western Railway, and in a beautiful part of the country, well calculated in many respects for enabling us to pass a happy session, I therefore beg to move "That the Anniversary Meeting for 1848, take place at Taunton, and that Stephen H. Macmullen, M.D., be appointed President Elect."

I should tell you that we have a very flourishing branch of the Association at Taunton, and that it was established under the impression that we should pay them a visit; they are anxious to see us, and I am sure will do everything in their power to make the meeting a happy and successful one. He regretted that Dr. Macmullen was not present, but he had received a letter from him on the previous day accounting for his absence, which was unavoidable.

Mr. Gisborne, of Derby, seconded the motion, and hoped they should have the same kind and good feeling shewn at Taunton as they had experienced at Derby, and that the papers read might be as valuable and as instructive as those read on the present occasion.

Dr. Conolly, of Hanwell, said,—I am sure that every gentleman who has attended this meeting must have felt convinced of the great value of the communications presented to it, and at no former meeting have I ever heard papers read so interesting and so numerous. I do not wish to make individual observations, but I cannot pass over in silence the great improvements in the instruments of Mr. Sibson, which we certainly might have expected after his valuable communications to us at Leeds. If we had done nothing else, we have done a great deal in causing such valuable information to be made public. I shall content myself by moving "that the thanks of this meeting be given to those gentlemen who have furnished papers and communications at this meeting."

Mr. W. Jackson seconded the motion, and alluded to the admirable preparations and plates with which Dr. Paxton had illustrated his address.

Dr. Robertson then proposed a vote of thanks to the President, whom he had known for some years, and was sure that all who had attended the present meeting must have been impressed with the ability, urbarnity, and zeal, displayed by Dr. Heygate in the discharge of his onerous duties as President.

Dr. Branson seconded the motion, which was carried by acclamation.

The President, Dr. Heygate, returned thanks, assuring the Members of the Association that he had great pleasure in rendering the feeble assistance which he had done, and must tell them that his presence among them had contributed to some of the happiest moments of his life.

Dr. Conolly, of Cheltenham, proposed that the thanks of the Association be given to the Mayor and Corporation of the Borough of Derby, for their kindness in granting the use of the Town Hall. It must be obvious to them all that a great deal of the success attendant upon these meetings depended on the treatment received from the gentlemen of the towns they visited, and the conduct of the medical profession towards them at Derby had been characterized by the utmost kindness and hospitality. To the authorities of the town they ought to feel much obliged and grateful for giving them the use of the building in which their meetings had been held, and the way they had been treated in every respect.

Dr. Radford seconded the motion, which having been carried unanimously,

Mr. Douglas Fox acknowledged the compliment on behalf of the Mayor and Corporation.

The President then vacated his seat, and the business of the meeting closed.

THE DINNER.

At six o'clock on Thursday evening the members of the Association, to the number of 120, dined together in the Assembly Room of the Royal Hotel, Derby.

The President of the Society, Dr. Heygate, was in the chair, and was supported by the Mayor of Derby (W. E. Mouseley, Esq.,) Mr. Crosse, the retiring President of the Association, Rev. Mr. Latham, Dr. Hastings, Dr. Boisragon, Dr. Robertson, Dr. Shearman, Dr. Streeten, &c. &c. The Vice-chair was occupied by Mr. Wright, of Derby. An efficient band was stationed in the orchestra, and played several popular pieces of music during the evening.

The President rose and said—Mr. vice-President and Gentlemen,—The first toast of the evening which I am about to propose to you, will at once call up your loyalty and your gallantry; and I am sure it does not require my feeble voice to enlarge upon it. It is the health of the first lady in our land, and the best of mothers—the Queen, and may she be prosperous in her intended journey to that romantic

and health-breathing part of her dominions, the Highlands of Scotland.

The toast was drunk with three times three, the band playing "God save the Queen."

The PRESIDENT next gave the health of the Queen Dowager, whose benevolence and liberality, more especially to the Church of England, they must all appreciate.

The toast was drunk with great applause.

The PRESIDENT next proposed the health of Prince Albert, the Prince of Wales, and the Royal family, which, having been duly honoured, was followed by the toast of "The Army and Navy, as alike the protectors of our common rights and our liberties."

The toast was responded to with great applause, "Rule Britannia" being played by the band.

Mr. NEWNHAM, of Farnham, proposed the next toast, and in so doing said—Mr. President and Gentlemen, it will require very little on my part to recommend to you the toast I am about to propose. It has often been stated that medical men are in general opposed to religion; that they are, in fact, practical atheists. I am quite sure, however, from my own experience, that if we look at the profession of the present time, or of the days immediately preceding it—and I will not go back to the days of our forefathers—that there is no body of men more decidedly favourable to religion than we are; and I am quite sure, whether in common or private life, we are more desirous of promoting the doctrines and practice of religion than the members of any other profession or any other body of men that can be met with in society. I am sure, then, you will all agree with me, that if the accusation I have spoken of be now made it is untrue, and that, on the contrary, we are always glad to call to our assistance those who will comfort—who will aid the souls, and succour the dying when we cannot do it. I am sure it gives us pleasure to know that we can always call in the aid of the clergymen residing in our neighbourhood, and we have felt the benefit of that assistance in contributing to wants we could not supply, for our province is to relieve the body, that of the clergyman to relieve the mind. We have ever felt great comfort in knowing that in such cases we can fall back upon the clergy to distribute that aid,—that comfort we cannot give; and if there is one body of men to whom we are indebted, to whom we are nearly united, it is the clergy. I beg, therefore, to propose as a toast, "The Bishop and Clergy of the diocese," coupling with it the name of Mr. Latham.

The toast having been responded to—

The Rev. Mr. LATHAM, of Derby, rose and said, Mr. President and gentlemen, although I am taken by surprise at the compliment just paid me by uniting my name with the toast, I am not the less grateful on that account. I have listened with great interest to the remarks of Mr. Newnham, and my heart does indeed respond to many of those observations he has uttered, and I hardly know whether to thank him more for the compliment bestowed upon the Clergy, than honour him for his sentiments. If he has found that his profession is at all indebted to the Clergy, I am truly glad in being able to say—and I see one at the table who will agree with me—that we are not less indebted to the medical profession for the assistance we derive from them. I do feel it a happy circumstance, a high compliment, when the intelligent important, and beneficial class of society represented by this assembly thus speak of the Clergy to which I belong. It has often happened to me in the daily exercise of my profession that I have had to test the kindness—the charity—the benevolence of the medical gentlemen in this town, and I can bear testimony to the readiness at all times to meet the wishes of myself and my clerical brethren, without any inquiry as to fee or reward for their services. They are always, I have found, ready to attend to the wants of the poor, and I see at this table a medical gentleman to whom I have often sent pauper patients, and in no instance has assistance been refused because there was no pecuniary reward; on the contrary, they have been treated with the same promptitude and kindness as if they had belonged to the upper walks of life. I can hardly resist the impulse of my feelings, when speaking of the kindness of medical men, when I look to the treatment I have received from them when I was in India, or since my return to this country, and I can assure you that kindness will never be overlooked by me. I delight to look at the connection between your profession and mine, for it is your duty to look to the maladies of the body, it is ours to look to, and endeavour to alleviate, the spiritual miseries of our fellow creatures, and I regret to say that there are much less urgent appeals made to us than there are to you. Often have I been sent to visit the sick and dying, not so much at their own request, as from the fact of the subject having been brought before them by their medical attendant. I regard this with much gratification, and I can assure you that the sentiments uttered by my friend—if I may call him so—in proposing the last toast are sentiments very general among the medical profession in this town, and I hope in other places; and I do trust that we shall always recognize each other as fellow workers in acts of benevolence. The Rev. gentlemen then resumed his seat amidst loud marks of applause.

Dr. ROBERTSON, at the request of the President, proposed the next toast as follows:—Mr. President, Mr. Vice-President, and Gentlemen,—the kindness of the President has confided to my hands a toast which I should be extremely sorry to relinquish, though I feel my utter inability to do it that justice which it is well worthy of. It is, gentlemen, "The health of our distinguished friend and founder of this Association, Dr. Hastings." I suspect gentlemen there are not many among you who have known Dr. Hastings the number of years that I have had the privilege of knowing him, and I am certain there is not one of you who can estimate more than I do his intellectual gifts, or esteem him more as a private friend, and therefore it is that I should be sorry, as I said before, to relinquish the proposing of this toast. I was one of the first to whom was communicated the design of the formation of this Society, and when the project was named to me, I thought Dr. Hastings was about to commence an Herculean task that he would not be

able to accomplish, but the result has shewn us what great energy, combined with great ability, may do, the Association now numbering near two thousand members of the profession, scattered throughout the provinces. I must then give my friend great credit for his energy and perseverance, and the dexterity with which he has managed the affairs of this Association, especially when it is considered that, like the muses, we are supposed to be of the *genus irritabile*, descended as we are told, from Apollo, and noted as we have been in times past for a want of unity, and for squabbling together. But Dr. Hastiugs has shewn great management in keeping us together, and in that respect this Association has been of great service in bringing into contact the medical gentlemen of the provinces, in renewing the intimacies of former years, as in my case, and enabling us to make many new and valuable acquaintances which we should not have done but for this Society. Independently of this, the Association has been of great service in the advancing of Medical Science, and I hope it will go on prospering and prospering, and that it will remain the best of all monumeats to our esteemed frieud. I will not detain you long as many other gentlemen have to address you, but I will say, speaking of the Society without reference to the "Journal," or the publication of our "Transactions," that our meetings are replete with, and are remarkable for the addition of much valuable and original information, and though I have been at many of our meetings before, I have never been so delighted as at the present meeting, in consequence of the quantity of valuable and original information I have derived from it, and which I should not have known where to obtain from any other source, I feel I shall in all respects return home a better man than when I left there, and shall carry away with me many useful ideas which I should not have done had I not attended this meeting. I have now gentlemen to propose to the health of Dr. Hastings, as the founder of this Association, and though I know that some of you don't like noise, I must ask for three times three to this toast. The toast was drunk with enthusiastic cheering.

Dr. Hastings, in rising to acknowledge the toast, was received with loud applause; on its subsiding he said—Mr. President, Mr. Vice-President, Dr Robertson, and friends and fellow members,—Although I rise for the fifteenth time to thank you for your kindness to me, I do not yet find that I have learned my lesson, or that I am adequate to express to you my gratitude for the manner in which you have at all times acknowledged my services. It is now fifteen years since we commenced our experiment, which it was considered, by a majority of our friends, would not progress as it has done, and that I was too sanguine. They were of opinion that some good might be done by the Association, but they never considered that at the end of fifteen years we should stand in a position which no Society of medical men in England ever before occupied. I say not this to disparage other Societies, but that I may give full vent to the feelings of gratitude I always feel, when I contemplate the labours and objects of the Association, and the members connected with it. I can assure you it is no small gratification to have combined together all the medical energy and intelligence of the provinces of England. Before the existence of this Society, we did not as all exist as a body of men, but now we are recognized as a great body of medical practitioners, meeting together for the advancement of medical science, and for promoting the happiness of mankind. I always look upon our meetings as assemblies of a deliberative character, where we have "the feast of reason and the flow of soul," the conjunction of social and intellectual enjoyment. We are united together by the ties of human kindness, and each endeavours to stimulate the other to renewed exertions for the benefit of mankind. We have inscribed upon our banner "The advancement of medical science," and that has been unfurled at every meeting; and upon no occasion have we lost sight of that principle, but on the contrary, we have always endeavoured to carry it out. The present meeting will be distinguished by efforts for that purpose, and I can point to what has been done here, and which is likely to fructify and produce noble results to our profession. We cultivate a noble art, and it is no common privilege to meet together and to dedicate our faculties to the furthering of its purposes. Gentlemen, I trust that each succeeding year will find this Association cultivating the noble object to which I have alluded, and then I have no doubt we shall continue to increase in numbers, to secure the approbation of the public, and assist more and more in alleviating the miseries to which human nature is subject. I say, gentlemen, that we are called upon to encourage each other in our great work, and that we are met for the promotion of objects of the most noble character—that is the cultivation of medical science, and by that means to promote the alleviation of human misery, and that in so doing we should cultivate those feelings of charity, love, and kindness, that should at all times distinguish the members of the medical profession. Whatever may be said, gentlemen, of past times, of those bickerings which we have been accused of indulging in, we can speak of the present—we can look forward to the future with confidence that they are at an end. We can find in these meetings a pledge that we are getting rid of all those pretty squabbles that have formerly arisen. We take our Polar star to be the alleviation of human misery, and the alleviation of human suffering, by means of medical science, to be the only object of our attention. Gentlemen, I will say for myself, that I have always felt the most unbounded delight in meeting this Association, and I have never returned home without, I hope, being a wiser and a better man than when I came away. There is a rising desire, as testified in this meeting, to cultivate the right feelings of human nature, and I shall return to my native city full of delight at the result of our anniversary. I shall tell my friends at home that you contemplate paying them a visit, and holding another anniversary in the ancient and faithful city of Worcester, and I doubt not when I make the announcement there will be great joy in that city, and that it will be carried throughout the hills of that fertile county. I can only say, in conclusion,

gentlemen, that every year makes me more grateful to the Almighty that he has permitted me, in conjunction with those I see around me, to form this Society; and that he has spared my life, not only to see its birth—to see its adolescence—but, as I trust not, its old age, for I hope that it will go on for many years to come, and that it will increase from time to time, and the present founders of it may be spoken of with reverence by those who follow after. I thank you, gentlemen, most sincerely, not only for drinking my health, but connecting me with this great and noble Association as one of its founders. Dr. Hastings then resumed his seat amid loud applause.

Mr. Soden, of Bath, in proposing the next toast said—I have been called upon, gentlemen, very unexpectedly, to propose the next toast, and as far as the subject is concerned I have great satisfaction in so doing; but I feel a want of power to do justice to it, and am therefore sorry that it has not been placed in the hands of a more able advocate. So much has been said of the social advantages of medical science, that I shall not take up your time upon that point. I was, gentlemen, present at your first meeting, at Worcester, and since I have attended your meetings in various towns, at Bristol, Leeds, Birmingham, Sheffield, Cheltenham, Liverpool, Northampton, Norwich, and now Derby, though last not least. On these occasions it has been my good fortune not only to meet with old friends but to make new ones, who, I must say, have been among the greatest solaces to my life—gentlemen with whose names I was familiar from their writings, but who, without the means of this society, I should not have known personally; and wherever I have gone, I have found that the members of this Association have received such kindness and hospitality that it would be ungrateful in me not to mention it. We experienced it last year at Norwich, and all who are here and were there will, I am sure, bear testimony to the kind hospitality with which we were received by Mr. Crosse. His name is too well known to need any eulogy to be pronounced upon him; but were he absent I should, perhaps, say more than I now shall; but I am sure you will believe that I feel deeply the estimation in which such a character as Mr. Crosse's ought to be held. The Society is greatly indebted to him for many things, not the least his conduct as President during the past year. I therefore beg to propose "The health of Mr. Crosse, the retiring President of the Association." The toast was drunk amid loud applause.

Mr. Crosse, in returning thanks, said, Mr. President and gentlemen, I recollect at the first and earliest occasion of my attending a meeting of this Association, I said at its conclusion that I had been breathing a medical atmosphere; and during the many years that have since intervened I have breathed the same pure air, that no chemistry could have rendered better, or that would tend more to my health or my comfort. I beg to say that the information I have derived from meetings of this Association has been very great, and all those who have contributed to that information are entitled to my gratitude. I have not attended these meetings on one occasion that I have not found something in them that has enabled me better to sustain those difficulties that arise in our profession. I confess that during the last few years from the workings of this Association I have been indnced to study my profession with the same earnestness which I did forty years ago, and the more I study it, the more do I find its beauties expand, the more deep its researches. I have now, gentlemen, "passed the chair," as they say in some ancient Lodges, and have been a member of this Association for the last twelve years, and am now, I believe, among the senior members, for we have to regret every year the falling off of some through age, or infirmity, or death, but I am happy to say not from lukewarmness. But no meeting has afforded me so complete a consolation as the present one, for I have been struck mostly with the remarks of the junior members to whom I have been introduced during the last two days. If, then, we have grief upon one side in the falling off of some of our oldest members, I am sure those around me will agree that we are perfectly satisfied with the rising generation who are to supply our places when we are gone, and attend to the prosperity of this Association. I speak this after feeling it to have been my duty to attend your meetings from the commencement of the Society down to the present time, and feeling as I do that we are much indebted to the junior members of our profession for the communications they have made; and, without naming individuals, I can say that I have been much delighted at this part of the proceedings. I have now, gentlemen, to thank you for the kindness I have experienced from you upon this and all other occasions when we have met. It has been suggested to me, gentlemen, that I should allude to your present valued President, who has so ably performed his duties at this meeting. Of the earnestness with which he has undertaken and carried through those duties I have the best evidence, in having corresponded with him twelve months ago, and occasionally since that time, in order that he might take the best measures to secure our comfort, and I have great pleasure in proposing his health. I will only say that in paying these honours I feel sure that you are circumstanced as I am, and that you do it from the heart.

The health of the President was then drunk with three times three.

The President then rose and said,—Mr. Vice-President, Mr. Crosse, and gentlemen,—I can assure you I rise to thank you for your kindness with feelings hardly describable. My best powers shall be devoted to the interests of your Institution; and if I can add one link to the chain, or add one stone to the vast building that my esteemed friend has so far built up, I shall retire from office at the expiration of the year with great feelings of satisfaction, that I have been able to do so much.

Dr. Hastings then, in an appropriate speech, proposed the health of the Mayor of the borough of Derby, at the same time expressing the obligations they were under to the Mayor and Corporation, for the use of the Town Hall, and the general courtesy they had received from the authorities of the town.

The toast having been drunk with applause,

W. E. Mousely, Esq., (Mayor of Derby,) returned

thanks, and assured the members of the Association of the desire on the part of the Corporation to treat the medical profession with that respect due to them, considering, as they did, that they were a body of men who devoted much of their time to the advancement of science, and who bestowed its benefits gratuitously on those who could not afford to pay for their assistance. He need not remind them that Derby had been famed for medical science, as he need not tell them a Darwin lived in that town. It was such men as him and as the gentlemen who had so ably addressed them that evening, that made the public feel that their lives were prolonged, and their comforts enhanced, by the scientific attainments of the medical profession. In ancient times it was usual for medical men to be known by some sign or figure, but now he was happy to say they were known only by their sterling worth, or by their scientific attainments, instead of ancient quackeries. He thought that the comfort, the happiness, the convenience of every member of society was dependant upon medical science and skill, as he himself had experienced, being at the age of 60, free from disease, and fit to compete with any man in point of health. He regretted deeply that one class of medical men, who had important duties to perform, were not remunerated for those duties as they ought to be. He had not been Chief Magistrate of the town so long, but he had seen with respect and reverence the exertions of medical men among the poor, and feeling convinced they were not properly paid for those duties, he had mentioned the subject to his own immediate friends in Parliament, and he pledged himself he would not let the matter be forgotten, but endeavour to place those gentlemen on a better footing. It might be said to be presumption on his part as an humble individual to make that statement, but let them remember that the generous exertions of a few produced Magna Charta, and the oppression of one individual the famous Habeas Corpus Act, and he did hope they would do all they could in their power to unite, and use their exertions to obtain a remedy of the evil, and if they did that he thought nothing could stand against them. It had been said that in ancient times it had been necessary for the medical man to profess Atheism to gain notoriety, but in the present day a better taste was shown, for the profession now acted upon principle as well as science, and upon good sound moral principles, which he hoped they would continue to carry out. He hoped the Association would avail themselves of the accommodation offered in Derby another year, and any thing in his power to assist them there, or give to them that station and reward they ought to have, he should be always ready to give.

Mr. Wright, of Derby, Vice-President, proposed the health of Dr. Boisragon and the Vice-Presidents of the Association.

Dr. Boisragon, in acknowledging the toast, which he did at some length, said, was he not aware that he was indebted for the distinguished honour of responding to the toast before the meeting, from being one of those in the situation of Vice-Presidents, and another not very pleasing reason, on account of his seniority, he should have felt somewhat embarrassed after the eloquent speeches they had heard. Domestic circumstances had prevented him from attending their meetings so frequently as he otherwise should have done, the last time before the present, being when they held their great meeting at the Queen of the West, the city of Exeter. He had intended being at Leeds, where he had understood the degraded position of the medical profession had been fully gone into, and where it was arranged that a memorial should be presented to the Queen, through the then Home Secretary; but from some feelings of delicacy that was not carried out. His next regret was that he was not able to meet the Association at Sheffield. It being somewhat singular that in that Hall in which they then met, dedicated to mechanical science, the *genus loci* gave them some cutting remarks that might be useful to them if they had acted upon them. Their next meeting was under the able Presidency of Mr. Crosse, where many circumstances of an important nature were brought forward. In some degree he ought to apologize as he had not known until lately that he should be called upon to respond to the toast. He considered that they should as an Association, look first at the state of the profession at large, and then the mode which they should pursue to gain that position which they ought to maintain. His opinion was that the profession did not stand so high as it ought to do in the scale of society, nor was so much attention paid to its interests as there ought to be. They all knew that in law the poor man might plead in *forma pauperis* on account of poverty, but the lawyer got paid; not so the doctor, and he was sure there never was a plea of *forma pauperis* tendered to them, but it was at once taken cognizance of, and duly attended to. After alluding to the emoluments of the legal profession, to whom the highest offices and honours were thrown open, Dr. Boisragon contrasted the attention or rather negligence with which some of the medical men of this country, such as Harvey, or the Hunter's, and last not least the immortal Jenner, had been treated, to whom no mark of public gratitude had been shewn, and hoped that at no distant day the state of affairs would be altered, and medical men attain their proper position, and be rewarded for their efforts and discoveries, by which such great benefits were conferred upon the human race.

Mr. Douglas Fox, of Derby, proposed the health of Dr. Streeten, the Secretary of the Association, and was quite sure it was a toast that every gentleman in that room would receive with the greatest satisfaction; but, before he proposed that toast, he must, on behalf of himself and the members of the medical profession resident in Derby, say that it gave them the utmost gratification in seeing their professional brothers from a distance, but felt he ought perhaps to ask them to take the will for the deed. After paying a high compliment to the Mayor, as the most efficient chief magistrate they had had in Derby for a long period, he said he would then speak of one of those gentlemen connected with the Association, who had shown the utmost ability, zeal, and urbanity in the duties of his office. He alluded to their valued Secretary, Dr. Streeten, whose

health he begged to propose, and he was sure that a great deal of the prosperity of the Association was dependant upon him. He could not express the delight he felt in having had an opportunity of making the acquaintance of so many distinguished members of the profession, whom he had before only known by repute, and trusted it was not the last time he should have an opportunity of seeing them; but that he should also see the Association hold another happy meeting at Derby. The toast was drank with loud applause.

Dr. STREETEN, in reply, expressed his inability adequately to acknowledge the kindness with which the toast had been proposed and received. At that late hour of the evening he would not detain them, but he begged to say that whatever lay in his power to do for the welfare of that Association he should only be too happy to have an opportunity of doing it. He would beg, with the permission of the Chairman, to pass from speaking of himself, and propose the healths of the gentlemen who had so kindly undertaken the duties of the Local Committee upon the present occasion. He was sure all present would say with him that they were much indebted to them for the efficient manner in which they had discharged their duty and received them in this town. The hospitality evinced toward the Association was beyond all praise. In no place in which they had before met had they been received with a greater amount of kindness than they had in the town of Derby; and he thought he should fail in his duty if he was not to propose the health of the Local Committee, who had acted so nobly for them. The toast was drunk with rapturous applause.

Mr. GISBORNE, of Derby, on behalf of the Local Committee, assured the Association that if the slight duties the Committee had had to perform had met with their approbation, or contributed to their comfort, the Committee would feel they had done their duty. At the same time passing a tribute of praise to Dr. Heygate, to whom great credit was due for his activity and his zeal in the promotion of the interests of the medical profession—a body of men, not met like a band of hydropathists, or mesmeric quacks—but men who sought to promote their profession on the solid and imperishable basis of scientific truth.

Dr. CONOLLY, of Cheltenham, proposed the healths of Dr. Shearman and Mr. Walsh, and thanks to them for their instructive Medical and Surgical Addresses, at the same time congratulating the gentlemen named on the ability displayed by them.

Dr. SHEARMAN, who delivered the Medical Address, briefly returned thanks, regretting the absence of Mr. Walsh, who had been obliged to leave Derby on the former evening.

Dr. RANKING, in proposing the next toast, said the assembly had only drunk the healths of those who had contributed to their intellectual enjoyment, but as they had a social meeting of that night, he begged to propose the health of those who had had the arrangement of the table, he alluded to the Stewards, Mr. Fearn and Mr. Johnson, &c.

Mr. FEARN, in reply, said he should be doing great injustice to his feelings, and those of his colleagues, if he was not to express feelings of thankfulness for the honour which had been done them, and on behalf of the medical residents of the town, he might say that the two days nearly over had been the happiest they had spent a long while.

Mr. JOHNSON then addressed the meeting in a long and humorous speech, in which he spoke of the growing intelligence of the junior members of the Association, and the value of the papers contributed by them, a fact which he could hardly account for, seeing how few young men when he was one were enabled to express their thoughts on paper, and enunciate such bold and clear views as the younger members of the profession now did. The time was now gone by when men would go one, two, or three hundred miles to see a physician in London; and while he would not disparage the men of the greatest talent in London, he was sure he should not be offering any thing derogatory to them in placing them with such men as Hastings, Conolly, Hodgson, and Johnstone, who were found in the Provinces. Mr. Johnson next referred to the treatment of the medical officers of Poor-Law Unions, and expressed his hope that the system of centralization would be done away with, and a better and more regular system exist in its place.

Dr. JOHN CONOLLY then proposed the health of Mr. Wright, the vice-president of the evening, whom he described as one of the most amiable and kind men in the town of Derby, and hoped he should have many more opportunities of seeing him in health.

Mr. Wright briefly returned thanks, soon after which the festivities of the evening were brought to a close by the Chairman vacating his seat.

FEEGEE SURGERY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The subjoined case appears to me worthy of insertion in the Journal of the Association.

I remain, Sir,

Your obedient servant.

AUGUSTIN PRICHARD.

Red Lodge, Bristol,

July 16, 1847.

The following history gives us a sample of surgery in the South Pacific. The subject of it was admitted as a patient at the "Dispensary for the Cure of Complaints in the Eyes," in Bristol, for the purpose of undergoing the operation for the cure of staphyloma, which was performed in the ordinary way by Mr. Estlin, and from which he recovered in the usual time.

T. ——, left his native county, (Pembroke,) in 1828, and was cast away upon a reef, in the South Pacific Ocean, whilst upon a whaling expedition. His party ultimately reached the Feegee Islands in 1829, and he returned to England in 1847, after having suffered extreme hardships, and having met with more misfortunes and extraordinary adventures than any other besides Ulysses and Robinson Crusoe ever experienced.

"Multum ille et terris jactatus et alto,"

may fairly be applied to this man. He is now occupied with writing an account of his reverses for publication. I shall therefore confine myself to a description of a part

of his misfortunes, which he will be unable to introduce into a book intended for general reading.

In the year 1831, he employed himself, and as many of his companions in misfortune as had escaped the danger of being swallowed by the waves, or the equally imminent peril of forming a part of a meal for some of the cannibal Feegees, in building a schooner, in order to trade with the neighbouring islands. Whilst thus occupied he struck himself with the handle of an axe upon the right testicle. He was disabled from work at once, and the organ began to swell. In about three months it became very hard, and larger than he could grasp with his two hands, and being unable to walk without great difficulty, he put himself in the hands of a native surgeon, who recommended excision as the only remedy. The operator is obliged, by the laws, to practise upon pigs until he is considered sufficiently qualified to perform upon human subjects.

The preparatory treatment consisted in feeding the patient as much as possible for two or three days previously, and immediately before the operation he was compelled to make a hearty meal.

He was placed upon a bed of fresh leaves, and the surgeon, (using for his instrument the patient's razor,) made an incision about seven inches in length down the front of the tumour, simply cutting through the integument. The second incision of the same length, and in the same direction, penetrated the tunica vaginalis, and a quantity of clear fluid gushed out, revealing the nature of the malady. The patient, who watched every step of the operation, seeing his testicle of a natural size at the back of this large sac which was laid open, wished the operator to desist at this stage, but he was assured that the disease would return if it was not completed. The savage then seized hold of the gland with his fingers, and dragging it out of its situation, whipped it off at a stroke of the razor; and then, being well satisfied with his success, he held up the excised organ between his finger and thumb saying, "Shall I roast it and eat it?"

No after-treatment was adopted. He was kept cool, and not allowed to move hand or foot.

On the fifth day he was washed by having cold water thrown over him, but the hæmorrhage continued until the tenth day, when it stopped spontaneously. When he was not too faint from loss of blood, in this interval, he could hear the blood spinning out against the vine leaves which formed his bed. The wound contracted and ultimately healed up.

The disease then recurred upon the left side, and attained a large size, but having learnt a little by his former experience, he used to tap it himself with a lancet, and a quill, and this he performed at intervals varying from three to twelve months, twenty-seven times. Upon the last occasion he was startled whilst in the act of making the puncture, and "injured" himself. This led to the formation of hæmatocele.

He arrived in New Zealand in 1846, and was tapped again, and the sac was afterwards injected, and the disease cured.

After the excision of the right testicle, the King of the Feegees used to visit him daily, having told the surgeon that if the patient died, he should be killed, and the patient buried on the top of him.

On examining him I found a scar the result of the incision made by the native operator, and the left side of the scrotum covered with the scars of the twenty-seven punctures. The left testicle is high up and behind; in front of it is a very hard and oblong tumour, about two inches in length and one in breadth, which he says is the result of the puncture which produced the effusion of blood into the tunica vaginalis. It is very probably a deposit of fibrin, which has become organized. It is productive of no inconvenience, except that it compels him to wear a suspensory bandage, and he informs me that the function of the remaining testicle has escaped unscathed from all the numerous dangers which it has incurred.

THE WARM BATH IN DROPSY AFTER SCARLET FEVER.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

In your "General Retrospect," 28th July, you state:—"Dr. Golding Bird remarks, that as a prophylactic remedy the warm bath is invaluable in the treatment of dropsy after scarlet fever. He scarcely recollects a case occurring, where the warm bath was daily used, as soon as the skin began to exfoliate and continued until a healthy perspiring surface was obtained." I have for many years employed warm baths, as here recommended; but several cases of dropsy having occurred under the treatment, I found that it happened in cases where the bath failed to produce *speedy* exfoliation of the skin. I then used and for some years have continued to employ, a modification of the warm bath, and with uniform success. I direct a quantity of bran to be scalded, the bath then reduced to a proper temperature, and continued friction to be kept up with handfuls of the bran during the immersion. The skin is speedily removed.

Yours obediently,

THOS. H. SMITH.

St. Mary's Cray, Kent.

RAPE PERPETRATED ON A FEMALE WHILE UNDER THE INFLUENCE OF ÆTHER.

That which had been suspected as a probable result on the introduction of the new narcotizing agent, has, according to the *Gazette Médicale*, actually occurred in Paris. Last week a female went to a dentist to have a tooth extracted. He advised that it should be stopped, and, to avoid the pain of the operation, recommended his patient to inhale the vapour of æther. What passed while the female was under the influence of the vapour may be inferred from the following facts:—The young female was observed to leave the dentist's house about three hours after she had entered it in a very disordered state. This attracted the attention of her employer, who could not account for her long absence. The injured party, notwithstanding the stupefying effects of the æther, retained some recollection of what had passed, and from some words which fell from her,

suspicion was immediately excited. She was examined by a physician, who reported that her person had been violated.

The dentist has been arrested, and is about to be prosecuted for the offence.—*Gaz. Med., Juillet* 31, in *London Medical Gazette.*

MEDICAL ETHICS.

In consequence of a paper on Medical Ethics, read by Mr. Allen, of Manchester, before the Medical Society of that town, another Society is in course of organization to carry out the objects contemplated in Mr. Allen's paper.

At a meeting of medical men on the 2nd of August, Dr. Radford in the chair, the following resolutions were unanimously adopted:—

It was proposed by Thomas Dorrington, Esq., and seconded by Dr. Aikenhead:—

"That this meeting considers it desirable to form a Society to be called the 'Manchester Medico-Ethical Association,' the objects of which shall be to support the respectability of the medical profession, and promote good feeling amongst its members, by framing and adopting a code of etiquette, and by appointing a governing body to enforce the same, arbitrate upon disputed points, and adopt all such measures as appear best calculated to effect the above objects."

Proposed by S. Crompton, Esq., and seconded by D. Noble, Esq.:—

"That the following gentlemen be appointed a Provisional Committee for the purpose of framing laws and regulations for the government of the Society, and suggesting a code of etiquette for its adoption, viz.:—Dr. J. L. Bardsley, Dr. Radford, Dr. Browne, W. J. Wilson, Esq., D. Noble, Esq., S. Crompton, Esq., T. Dorrington, Esq., T. Nursaw, Esq., T. Mellor, Esq., Dr. Aikenhead, and R. Allen, Esq."

Proposed by Thomas Nursaw, Esq., and seconded by D. Lynch, Esq.:—

"That the Provisional Committee shall at its discretion convene a meeting by advertisement of the members of the profession, resident in Manchester and its neighbourhood, for the purpose of receiving the result of their labours, constituting the Association, and electing the officers thereof."

Medical Intelligence.

APPOINTMENTS.

Robert Bentley, Esq., M.R.C.S., has been appointed Lecturer of Botany at the Medical School of the London Hospital, in the room of Mr. E. J. Quekett, deceased.

The King of the Belgians has created M. Orfila an officer of the Civil order of Leopold.

The King of Denmark has conferred the Grand Cross of the Order of Danebrog, a dignity to which is attached the title of Excellency, on Baron Berzelius.

IRISH MEDICAL MEN.

Through the intervention of Dr. Whateley, Archbishop of Dublin, the sum of £500 has been given from the amount collected in this country for the relief of Ireland, towards a fund for the widows and orphans of those medical men who fall a sacrifice through their attendance upon fever.

GUY'S HOSPITAL.

The triennial prize of £300, under the will of the late Sir Astley Cooper, Bart., deceased, for the year 1847, has been awarded by the physicians and surgeons of Guy's Hospital, to Dr. Richard Halahan, son of the late Professor Halahan, of the Royal College of Surgeons, Ireland. The prize was given for the best essay on the Uses and Structure of the Super-renal Capsules.

ROYAL COLLEGE OF SURGEONS.

The Jacksonian Prize.

The Council of the College of Surgeons have announced that the subject for competition amongst the members for the Jacksonion Prize for the ensuing year is "Diseases of the Mammary Gland, Male and Female, and the Treatment thereof."

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates Thursday, July 22, 1847:—John White Bridgeman; Robert Baker.

Gentlemen admitted Licentiates Thursday, July 29th.—James Herbert Budd, Guildford; Henry Bate, Truro; William Brook Charles Maxwell; Hugh Hastings, Stockenchurch; Edw. McDonnell, Culenton

OBITUARY.

Died, July 24th, at Saffron Walden, aged 38, Thos. Mickley, Esq.

Lately, at Paris, aged 52, M. Texier, Physician to the Household of his Majesty the King of the French, and Surgeon to the National Guard.

At Birmingham, from fever, Henry Bunn, Esq., one of the District Surgeons. The salary of the office, which Mr. Bunn had only held six months, is £20 *per annum!*

TO CORRESPONDENTS.

Communications have been received from Mr. E. F. Dehane; Mr. T. C. Girtin; Dr. C. E. H. Orpen; Mr. T. H. Smith; Mr. Bartrum; M.R.C.S.; Dr. Pickford; Mr. A. Prichard; Dr. W. Gill; Dr. J. R. Wardell; Dr. Carlyon; Mr. R. Allen.

M.R.C.S. may rest assured that the statement in his letter is altogether without foundation, and if he will favour us with his name and address, we will give him better authority than that of an anonymous informer that it is so.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

THE RETROSPECTIVE ADDRESS,

DELIVERED AT THE SIXTH ANNIVERSARY OF THE READING PATHOLOGICAL SOCIETY.

By Edward Wells, M.D., Physician to the Royal Berkshire Hospital.

(*Continued from page* 398.)

VII.—Fever.

On the 30th of September, 1846, Mr. Vines read a paper *On the Epidemic Fever then prevalent in Reading.*—Mr. Vines said his situation as surgeon to two large parishes in this town, as well as to the Reading Dispensary, independently of his private practice, had given him more ample opportunities of observing this epidemic than could have been possessed under other circumstances. His observations were intended to include the period of the last twelve months,—viz., from the 1st of September, 1845, to the 1st of September, 1846. The number of cases which came under his notice during this period, amounted to 306. The smallest number of cases occurred during the months of January, April, and June, and the largest number in February, July, and August. The number of deaths within the same period amounted to twelve, and of these, the largest number was in the months of March, July, and August, which corresponds nearly to the periods of the greatest amount of cases. According to this calculation, the average proportion of deaths was about four per cent. With regard to the localities in which the fever prevailed, the most densely-populated neighbourhoods were not always the most prolific. Isolated cases have occasionally occurred in well-ventilated places, but in these instances a communication has been generally traced with individuals or localities previously infected. The fever prevailed most extensively and most severely at the east end of the town, along the river Kennet. Throughout the winter and early spring months determination to the pulmonary tissues was a marked concomitant of the disease, which Mr. Vines thinks is attributable to the mildness and damp of the winter, and the low situation of the Kennet.

The fever throughout the year, was generally characterized by debility, or where acute symptoms set in, a rapid prostration of the vital powers has quickly succeeded. Hence bleeding or depletion of any kind has been scarcely warranted in the majority of cases. The mild, soothing, and supporting plan proved the most successful. Where constipation has been present, (which was, however, rarely the case,) the saline aperients with occasionally a dose of castor oil, the Liq. Ammoniæ Acetatis, the Nitrate of Potass, and Carbonate of Soda, had been freely administered. Where diarrhœa has existed, the Bicarbonate of Potass, Gum Acaciæ, Sp. Ætheris Nitrici, and Ipecacuanha, were given. The tenderness of the bowels rarely required leeches; blisters and mustard poultices were generally sufficient, with small doses of Hydrargyrum cum Creta frequently repeated. In no instance has calomel been given to affect the system. The pain of the head was generally relieved by a blister at the nape of the neck. In a few cases exhibiting a typhoid aspect, quinine, opiates, and port-wine, freely administered, were found of great utility.

In conclusion, Mr. Vines stated that the effects produced in the present epidemic have been principally upon the mucous membranes. The whole mucous tissues of the respiratory and digestive organs have been in turn affected: at one time the lining membrane of the throat and fauces; at another, the bronchial membrane; and latterly, the gastro-intestinal canal has been more particularly the seat of the morbid process; and the extent to which these different tissues have been diseased, has modified, in a certain degree, the severity of the fever, and produced such re-action on the nervous system, as tended materially to favourable or fatal results.

Mr. Vines illustrated these views of the constitution of the epidemic by appropriate cases, which I regret not to have room for inserting.

When Mr. Vines read this paper in September, the epidemic was at its intensity. His report, however, ceased with the first day of that month, after which time he found the fever to become more fatal; so that taking the cases from January, 1846, to January, 1847, the proportion of deaths in his practice was five per cent. upon the whole amount of cases.

Upon examining the records of the Dispensary, with a view to ascertain the mortality of the late epidemic, I find that from June to December, (both inclusive,) 155 cases of fever were treated, of which fifteen, or about ten per cent., died. These cases were distributed through the seven months in the following manner, showing a progressive increase and diminution in their number:—June, 6; July, 21; August, 40; September, 48; October, 24; November, 7; December, 9.

Sequelæ of Fever.—As a corollary to the above interesting account of our epidemic, I may mention,

that on the 3rd of March, 1847, Mr. Walford related the case of a child, which he had treated for fever in the first instance, but in the course of a few days the head symptoms became so prominent, that he began to doubt whether disease of the brain was not the primary affection. He daily expected the child to die, but diarrhœa with green stools set in, with relief to the head, and she afterwards got better. Some time afterwards extreme pain of the knee and hip came on, which could not be accounted for. The child still continued to suffer from the hip, with all the symptoms of morbus coxæ.

Mr. Harrinson stated that the father of the child had suffered in the same way.

Your reporter mentioned that during the late epidemic, a case similar in some respects to Mr. Walford's had fallen under his notice. A boy, five years of age, was convalescent from typhoid fever, when he complained of severe pain in the hip and knee, chiefly in the latter; he was quite unable to walk in consequence. Some incipient disease of the hip-joint was at first suspected, but by rest and tonics it had gradually and entirely recovered.

Abscesses in Scarlatina.—At the same meeting Dr. Cowan mentioned the case of a lady who suffered from scarlatina; abscesses formed in the legs, shoulders, and beneath the mamma, which were opened. She was then in a satisfactory state.

Croup in Measles.—On the same evening also Mr. Walford exhibited the larynx of a child who had died of croup, which supervened some time after measles. The chordæ vocales were very much thickened. Mr. Walford considered the chief interest of the specimen arose from the connection between croup and measles.

VIII.—Surgical Diseases.

The proudest boast of modern surgery is, that it shines more in the skill, with which it preserves the injured parts of the body, than which it formerly displayed in their removal. This remark, perhaps, applies more truly to the extremities than to any other division of the human fabric. Limbs which some time back would have been doomed to immediate amputation, for compound fractures and other injuries, are now not only preserved, but rendered as serviceable as ever to their owners. Still it is too often found, even at the present day, that the non-union of bones after fractures drives patients to submit to the loss of a limb, in preference to keeping it as a useless and troublesome appendage. Any operation, therefore, which is calculated to overcome this difficulty, is well worthy of our attention, and I have much pleasure in bringing before the notice of this Society the following successful instance of such a result:—

Operation for Ununited Fracture of the Forearm.—On the 5th of August, 1846, Mr. May introduced to the Society the patient upon whom he had some time previously successfully operated by excision for an ununited fracture of the radius and ulna.

An account of this case has already been published by Mr. May in the *Medical Gazette*; it will not, therefore, be considered necessary to repeat it in this place. Suffice it to say, that the sanguine anticipations of success, which Mr. May had from the first entertained, were satisfactorily proved to the members of this Society to have ensued from the operation. Perfect bony union had taken place, and the motion of the hand, which many had supposed irrecoverably lost, was already to a certain extent regained, and there was reason to hope would still be much improved.

At our last meeting, (May 26th,) Mr. May stated that this case was still progressing very favourably, and that he had every reason to anticipate that the man would ultimately regain the entire use of the limb.

I need not recall to your recollections that Brodie, in his recent lectures on Surgery, has uttered an anathema against this operation, which he says "no surgeon with a moderate share of prudence would perform." It is therefore of the highest importance that its merits should be tested in the crucible of experience, and that each successful case and each failure should be recorded.

Treatment of Burns.—The variety in the kinds of applications which have been recommended by surgeons to burnt surfaces, would lead one to suppose that they were not yet quite satisfied with those in general use, and that there was still room for some suggestions with respect to them. Although your reporter himself would venture to believe that surgeons have been too much on the look out for *specific effects* in the various applications used in the treatment of burns, and that they should be rather treated on *general principles*, yet as he knows that great success has in many instances followed Mr. Bulley's plan of treating these cases, he has much pleasure in calling your attention to a paper on this subject, which was read before this Society on the 3rd of February, 1847. Mr. Bulley stated that he had introduced this mode of treatment to the notice of the profession, and that it had met with the approbation of all those of his medical brethren who had made use of it. Out of six cases of burns which had been brought into this hospital during the last six months, three died; the survivors were treated with the treacle dressing. The plan adopted is to steep cloths in a mixture of one part of treacle to two of water, and apply them over the burnt surface. He attributed the beneficial results of this mode of treatment to the prevention of those metastasis of inflammation to internal organs which were so liable to take place after severe burns. It should be applied warm, (at a temperature of 98°.) He attributed its remedial power to fermentation which takes place in the treacle. He had found that anything producing cold renders the liability to metastasis greater.

I may state, that on the 2nd of December last, Mr. F. Bulley had exhibited a patient who had had extensive burns of the arms, neck, chest, &c. They had been treated with the *treacle dressing*, and were then nearly healed.

In the discussion on the subject, Mr. Vines mentioned a case where a patient was suffering from rheumatic pains of the legs, and had been treated by eminent men in various ways without relief, when an old nurse

recommended the legs to be wrapped in flannel soaked in treacle for some days, which procured him complete relief. He therefore thought there was some sedative influence in the treacle.

Fracture of the Clavicle.—On the 10th of June, 1846, Mr. F. Bulley stated that he had under his charge in the Hospital, a man, whose clavicle had been fractured in the effort of mowing. The fracture was situated near the acromial process. There was but slight displacement. The fractured bone was kept in situ, by a strong buffalo-leather splint, covered with adhesive plaster, and bound down by straps of emplastrum roborans, which, with a pad in the axilla, and the arms bound to the side, he generally finds successful. Mr. Bulley, also uses this leather in cases of fracture of the radius near the wrist with great advantage.

Dr. Bradshaw remarked that the leather splints possessed an advantage over those made with pasteboard, in not occasioning that irritation of the skin which was frequently produced by the latter, owing to the pitch or tar contained in them.

Hernia of the Stomach.—At the same meeting Mr. Harrinson presented to the Society a rough cast of the upper portion of the abdomen of a man, whose case he thus related:—While walking along the street the man was seized with a violent rigor and such excessive pain that he fell to the ground He had, however, recovered before Mr. Harrinson got to him. The cause of his sufferings remained unexplained for three or four days, when Mr. Harrinson discovered a small tumour in the upper part of the abdomen, to the left of the left rectus muscle, which disappeared on pressure, and dilated on coughing. It appeared to be hernia of the stomach, for if it were the colon, it would hardly have produced so great an amount of suffering. It did not require any treatment beyond the mechanical support of a truss to prevent it from protruding, and it was chiefly with a view to inquire what apparatus was best adapted for the purpose, that Mr. Harrinson brought the case forward.

Mr. F. Bulley stated that there was an apparatus, invented by Weiss, consisting of a circle of ivory adjusted by a spring and a belt, for umbilical hernia, which he thought might suit this case.

IX.—Diseases of the Skin.

Allinoism.—On the 30th of September, 1846, your reporter exhibited to the Society three female children from Padworth who are albinos, of the respective ages of seven and five years, and of nine months. The complexion of the father was brown, and the mother dark. The eldest boy, nine years of age, was of the same brown complexion as his father, and so was the second boy, three years of age. The two elder girls were unable to bear the light of the sun, and could only see objects when very close to the eye. The mother had borne six children; her first-born, a female, was likewise an albino, and died at the age of four days. The three surviving girls were very liable to bowel complaints.

X.—Statistics.

On the second of September, 1846, Mr. May read a statistical table of the cases of death which had occurred in his practice between August, 1845, and August, 1846, in which the modes of death are arranged in the order in which they occurred,—as apnœa, asthenia, coma, &c. This table has already appeared in the *Medical Gazette*, and is therefore probably familiar to you all.

I have now, gentlemen, gone through all the cases which have come under our notice during the past year. You will, I trust, agree with me in thinking that many of them possess great interest; and should their recapitulation have proved wearisome to you on the present occasion, the blame, I fear, attaches to your reporter. If to some I may have appeared too prolix, the best apology I can offer you is the anxiety I have felt to do full justice to every member of the Society.

The great length to which this address has extended will prove that we have not had to complain of any lack of materials for discussion since our last anniversary; still we cannot but remark that we have mainly depended upon the presentation of morbid specimens, and that independently of those specimens, very few papers have been read during the past year. Now, though I by no means wish to detract from the interest and instruction which is to be found in the recital of cases which have terminated fatally, and in the examination of the organic changes which have resulted from disease, still there is an equally important class of disorders, which do not ordinarily go on to a fatal termination, and of which we never have the opportunity of examining the morbid alterations upon this table. Such disorders at present seldom come under our notice; and yet no one can doubt that in a practical point of view, it is of much more value to the practitioner to treat successfully the curable diseases, than to be learned in the pathology of those which are unfortunately incurable. I would therefore venture to suggest that some means be adopted for securing at each of our meetings the reading of a paper, and I feel assured that no member will decline to take his turn, which cannot come more than once a year.

In conclusion, Gentlemen, it only remains for me to thank you for the patience with which you have listened to this, I fear too lengthy, address, and to express a hope that each succeeding year may produce a reporter more worthy of your Society.

ON FUNCTIONAL DISORDER OF THE LIVER.

By Robert Hutchinson Powell, M.D., Tunbridge Wells.

(Read at the Annual Meeting of the South-Eastern Branch of the Provincial Medical and Surgical Association, held at Reigate, June 30th, 1847.)

It is proposed in this paper to notice briefly some of the more frequent causes and modes of actions, with the principles of treatment pertaining to, certain functional derangements of the hepatic system; but the limits within which I am necessarily confined, will prevent

any attempt at division into distinct heads. In my remarks I would merely indicate those dynamical affections commonly known as "bilious complaints," arising, so far as the the liver is in fault, most probably from increased and *deranged* excretion, and a slightly *vitiated* condition of the bile, being seemingly produced by those morbific influences subsequently to be mentioned. Such inquiries will not be deemed obtrusive, when we recollect the frequency of biliary disorder in this—so to speak—age of bile, and the daily reference made to medical men for explanation of, and relief from, its due concomitants, which, from this continued discomfort, make every-day existence far from tranquil. We shall take a rapid glance at the anatomical and physiological relations of the liver.

The intimate anatomical structure of the liver is by no means satisfactorily determined, notwithstanding the minute attention bestowed on it. I shall not pause to describe the most recent statements, but merely remark that it may be considered the largest glandular organ in the frame, supplied with a numerous and complicated vascular apparatus, and nervous fibrils; and the secreting structure being arranged in lobules, the aggregate acini, &c., endowed with functions highly important to the animal economy. It will be of consequence to bear in mind the anatomical relations of the liver, especially of its ducts, to adjoining viscera, as from these will be found to arise many sources of biliary derangement.

The profession are doubtless aware of the modern notions held by physiologists as to the functions performed by the liver, and the uses of the biliary secretion to the economy. Of these the most important are said to be the production of a secretion indispensable to life. Recent and numerous experiments by Schwann have incontestibly proved this, although contrary opinions have been advanced by others. The immediate end subserved appears to be,—the abstraction from the blood of a fluid taking an important part in digestion and respiration, and the expulsion from the system of the *debris* of its tissues; its chief constituent being an organic compound, consisting, according to Dumas, of carbon, 63.5, + hydrogen 9·5, + nitrogen 3.3, oxygen and sulphur, 23.9; the last constituent being a non-oxidized body, goes far to prove its important office in respiration.

Chemists of the highest repute differ with respect to this compound; Berzelius maintains it to be bilin, a neutral body united with soda, probably like albumen; Gmelin, biliary sugar; Thenard, picromel a resinous substance; Liebig and Demarçay conceive it to be an oily acid—the choleic, united with soda. The discrepancies seem to arise from the latter authorities neglecting to examine *recent* bile, as pointed out by Berzelius, decomposition occurring with facility. Choleic acid is readily decomposed by various re-agents, acids and alkalies giving rise to new compounds, hence probably the difference of opinion as to the real constitution of the bile. It consists, according to Berzelius, of about 7½ per cent. of solid matter, in the proportion of,—bilin 5.0; chloride of sodium, lactate of soda and alcoholic extractive matter 1.5; alkaline sulphates, phosphates, with extractive, insoluble in alcohol 0.42; mucus and cholesterine 0.20; water making up the remainder.

According to Schultz, the quantity of bile secreted is considerable, but its exact amount has not been determined. Disease appears to alter its composition remarkably, the solid constituents being doubled, the fat and colouring matter undergoing the most remarkable increase, the saline ingredients being diminished. The bile appears, according to the researches of Bouchardat, to aid digestion only by furnishing soda for the saponification of the fatty ingesta; but Platner conceives this to be quite secondary and subsidiary to the liberation of bilifellinic acid, which combines with the elements of food, thereby preventing that decomposition and loss of its nutritive properties, which, he asserts, would otherwise ensue. These conclusions need confirmation. The effect of bile in augmenting the peristaltic action of the intestines is well known,—an effect probably induced by its saline constituents, as, except the colouring matter, the other biliary ingredents are found in health to have disappeared from the fæces when chemically examined; this disappearance, although contrary to the commonly received notions, clearly proves the important and necessary office subserved by certain constituents of the biliary fluid in respiration. The excrements of serpents being but slightly coloured would seem to confirm this view. We shall now revert to the more immediate object of this paper.

The popular opinion with respect to the frequency of biliary disorder, as arising from indigestion, is certainly well founded; the operations ensuing on the introduction of ingesta into the alimentary canal, are so intimately related, both anatomically and physiologically, with the liver, as to render the communication of deranged action from the former to the latter highly probable. In fact, disorder in one organ cannot long continue without implicating others, such is the beautiful harmony existing in the human mechanism. Indigestion, as resulting from biliary disorder, is likewise observed in the present instance; it shall be our care to search out the functional derangement first causing deviation from healthy action; and, at the same time, that regard is had to the several functions, to direct our special attention to that aberration first in order, if such can be traced. The difficulty of drawing a line of demarcation between gastric and hepatic derangement is, very likely, the reason why both states have been considered together by many systematic writers; for practical reasons, however, both will require separate consideration in the majority

of dyspeptic or bilious complaints. The functional derangement forming the subject of this paper, is probably attended by an increased and somewhat altered biliary secretion, the excretion of which is both retarded, and in part inflected, from it usual course. The experiments of Dr. Beaumont, who found regurgitation of bile into the stomach under certain circumstances to which we will revert,—the sweet taste experienced in the fauces, very likely arising from the presence of glycynin in the blood, which is excreted from the buccal mucous membrane on such occasions,—the constipation usually attending,—as well as the insalivation, acidity, nausea, and ejection of bile by vomiting, go far towards establishing this conclusion. Premising thus far, we proceed to investigate the causes and nature of this departure from healthy action in the liver.

That the food ingested exerts a marked influence over the bile, is a matter of common observation; lean animal fibre seems least likely to tax unduly the biliary function; all carbo-hydrogen substances, alcoholic liquids, and fat in particular, evidently cause an increased secretion of bile. The total amount of food, if used in excess, may likewise have a similar effect, either from the presence of those articles of food just mentioned, or from the morbid erythism set up in the stomach and duodenum, which, being propagated to the biliary apparatus, causes misdirection of its proper secretion, at the same time that its elements exist in the blood in unusual quantity. The anti-peristaltic action of the bowels is probably but a sequel and symptom of this state of things; confined bowels, at first an effect, subsequently becomes a seeondary cause of, derangement. But adverting to the less-recognized or more obscure causes of biliary derangement, repeated observation has led me to attribute, in many cases, its production to atmospheric influence—a cause familiar to most persons, but the manner of its operation not being sufficiently understood. A predisposition to be affected from this source, whether congenital or acquired, is increased by the nervo-bilious, known as the choleric temperament, which renders the individual of this conformation very susceptible to all atmospheric changes. Life being beyond certain limits, antagonistic to external forces, its relative activity will determine the amount of resistance of the vital powers to those agencies. Changes of temperature, its excess or diminution, by depressing the nervous influences, are well-known causes of biliary disorder. Heat also acts on the liver by checking respiration, and consequently, the carbonic acid exhaled, thereby compelling other organs to take on supplementary action, the liver being the principal emunctory. Cold, if not intense, and if unaccompanied with humidity, does not seem to have much tendency to overload the hepatic vessels; rather otherwise, especially from respiration being rendered more active. But atmospheric humidity, particularly when uncombined with the air, must have a noxious influence, either by checking excretion and exhalation from the skin and lungs, or by resolving its agency into that of the attendant negatively electric condition of the atmosphere, which operates more readily on the system when the air is surcharged with moisture. Moreover, heat and cold are invariably attended with, if not caused by, a change in the electrical state of that medium "in which we live, and move, and have our being," and probably best express this, its agency on the system: when + (plus) the nervous and vascular system acting well,—*cæteris paribus*; when — (minus) all the functions of the frame become torpid, the liver being peculiarly liable to inaction from its size, situation, and vascularity. There can be no doubt that much remains to be determined under this head, and principles of treatment constructed with reference to its important bearing on vital action. The electrical state of the atmosphere influences the hepatic circulation, primarily or directly, by diminishing nervous action generally; and indirectly, by inducing barometrical states of the air effecting inadequate pressure on the surface.

Now, in the disorder under consideration, the quantity of bile secreted seems to be augmented, obstruction of the systemic circulation seemingly favouring this by retarding the mass of blood passing through the portal vessels, thus determining a relative increase of electrical influence.

Closely related to the electric condition of the atmosphere, is its magnetic state; this must exert an important influence on the frame, as there are the best reasons for attributing all its changes to chemical action, the result of its polarity, or generally of its magnetic properties. The electro-magnetic force, which appears to produce increased biliary secretion from the liver, seems likewise to determine a similar result in the stomach of its normal acid secretion,—the liver representing the negative, the stomach the positive, pole. We find this view explanatory of the increased secretion of acid constantly attending biliary disorders, to which we shall presently advert. The magnetic currents accompanying certain winds may also strongly affect the system; the liver, from its size and office, giving most evident tokens of its disturbance. Again, lunar influence probably alters the magnetic state of the atmosphere which rests on the animal fabric. Cloudy weather, notoriously a cause of biliary derangement, is compounded of many agencies in relation to the system; but its concomitant electro-magnetic conditions, produced in part by the interruption of light, are the most important.

Another very frequent cause of biliary disorder arises from deranged nutrition, whereby the motive powers are diminished and digestion interfered with;

disturbance and mis-direction of biliary secretion ensuing in consequence. Of this more anon. Allied to the noxious influence of heat, neglect of *exercise* may be mentioned. Sleep, especially in autumn, acts in the same way,—namely, by unduly taxing the biliary function, consequent to checked respiration. Depressing passions probably act in a similar manner; as do mental emotions generally.

The last source of biliary derangement which I shall notice is gastric irritation. This state being constantly accompanied with acidity of the stomach, solicits or diverts the flow of bile to it. The recent experiments of M. Bernard, confirm those of Dr. Beaumont, as to this occurrence. Here we see a beautiful provision of Nature frustrated, and running into an abnormal process; for although intended to neutralize the free acid of the stomach, it sets up further irritation, and renders its contents indigestible. Platner has shown that when bile flows into the stomach, double decomposition ensues, its soda uniting with the gastric acid; the acid with which the soda was previously united, forming with bilin bilifellinic acid, which combines with the proteine compounds present, rendering them indigestible, and consequently, a source of continued disturbance. Pepsin, the organic principle of the gastric juice, is rendered inert in the same manner, and by neutralizing the free acid of the stomach, it loses its digestive properties, on albuminous matter. This obtains, according to the latter experiment, more particularly if bile be present at the commencement of digestion. In fact, morbid sensibility of the gastric mucous membrane, however induced, will solicit a flow of bile into the stomach.

The immediate effect and mode of operation of all these causes may be referred to regurgitant bile in the stomach; hence, after effecting abnormal changes, the remainder is absorbed into the torrent of the circulation,—effects greatly aggravating, if not giving rise to, the characteristic symptoms of bilious complaint, headache, nausea, deranged secretions, coldness, and general nervous depression. But the essential nature or point of departure from healthy action in the frame would seem, from the above facts, to originate in a lesion of the nervous system; hence, retarded circulation and abnormal secretion; the liver, from its peculiarities specially feeling this noxious influence, and directly producing the characteristic state. These progressive changes are in some measure illustrated in sea-sickness, in which the characteristic symptoms run as it were rapidly into each other, and quickly subside on removal of the exciting cause.

The preceding investigation will serve to direct our *principles of treatment*, which will have reference to the functions performed by the biliary secretion in the economy,—namely, a provision for eliminating from the blood effete tissues consumed in the lungs;—a fluid vicarious of the products of respiration, or of other functions when checked or deficient;—a necessary element in the digestion of certain alimentary principles;—and a means of sustaining the peristaltic action of the intestines.

1. A locality in which a temperate, dry, moderately-dense, and equable atmosphere obtains, will have an excellent effect in aiding other remedial measures. I have found the climate of Tunbridge Wells highly beneficial in such cases; and I mention this therapeutic indication thus early, feeling sure that the best directed treatment will not unfrequently fail, if the physical characters of the air in which the person resides exhibit those noxious conditions previously noticed.

2. A careful regulation of diet, subtracting as much as possible alcholic, fatty, saccharine, and amylaceous ingesta; perhaps of the latter, well fermented or gluten bread, well-boiled rice, and tender fresh vegetables in small quantity, are the least objectionable; lean and tender animal food in moderation, weak black tea, and milk, if it agree, twice daily; a small quantity of pale sherry if the vital powers be much reduced; otherwise, pure soft water;—these are most suitable. It will be understood that the proteine compounds are least likely to furnish pabulum for biliary fluid, or to tax the hepatic system.

3. The observance of such a regimen will go far to remove another pathological condition often present,—namely, gastro-intestinal irritation, which, as we know, is a fruitful source of biliary disorder; gentle friction, dry cupping over the abdomen, and the occasional application of mustard cataplasms, will be useful auxiliaries. Moderate exercise, especially on horseback, will prove highly useful by unloading the abdominal venous system. Tepid shower bathings, with brisk friction over the abdomen, will be advantageous; the surface should be well protected by flannel or cotton fabric. Regularity as to time of meals, and as to the length of sleep, in a well-ventilated room, not exceeding eight hours, with a tranquil state of mind, will powerfully co-operate with other means to restore the tone of the system, and the healthy action of the secreting organs.

4. I have little to say respecting medicinal remedies, such being well known to my audience. I may remark, however, that a reliance should be placed on hygienic rather than upon pharmaceutical measures, the former alone bringing about permanent improvement. Mercurials, though giving temporary relief, ultimately act injuriously if long continued, by depressing the system. Hydrargyrum cum Creta, and Extr. Hyoscyamus, given sparingly, will unload the abdominal veins, and correct vitiated secretion, these being combined with, and followed by, light vegetable tonics,—as rhubarb, hop, calumba, with alkaline, carbonates, and saline aperients. Drastic purgatives must be carefully shunned. The gastric intestinal mucous membrane is generally very sensitive in such cases, and will not tolerate mineral,

or even the more active vegetable tonics, at first; subsequently, however, chalybeates will produce an excellent effect, if this irritation be first subdued, and if combined with alkaline aperients. A suitable mineral water will often prove highly useful,—as the artificial Vichy, or Ems, or saline Cheltenham water, followed by a course of Tunbridge chalybeate. From the introduction of aërated chalybeate water here, at my recommendation, a most efficacious and agreeable remedy may be now had, a course of which will be attended with much benefit, if preceded by appropriate treatment.

The carbonic acid with which this aërated water is surcharged, is in itself a highly useful remedy, its reception into the stomach being followed by agreeable and exhilirating sensations. From its stimulant impression on the organic nerves, distributed over the mucous coat, it increases the secretion of gastric juice. Its effects, when received into the blood are analogous to those arising from the vegetable acids. Finally, carbonic acid evidently enhances the tonic properties of the chalybeate.

In conclusion, I would just remark, that in biliary disorders, as in all others, we must seek for the pathological cause, and counteract its influence, if we look for success,—a result, moreover, to be further solicited by restoring *all* the functions to full and harmonious action.

PERIODICAL PURPURA VICARIOUS OF THE CATAMENIA.

By Charles Barham, M.D., Truro, Physician to the Royal Cornwall Infirmary.

(Read at the Annual Meeting of the South-Western Branch of the Provincial Medical and Surgical Association, held at Truro, July 28th, 1847.)

Ann Teague, aged 17, was admitted into the Cornwall Infirmary under my care, November 12th, 1846. She is rather tall, well formed, with dark hair and eyes, and a pale exsanguine countenance. She has always had sufficient food and clothing, and has been only employed in household work. Her father and mother are living, and she has six brothers, and one sister, five years old. They are all in good health. With the exception of the ordinary diseases of childhood, which she passed through very favourably, she had no illness, but always considered herself well and strong till about two years ago; she was then seized suddenly with a severe pain in the right side, just below the ribs. She was attended by a medical man, and in about a month the pain left her. About two months after this she expectorated, without cough, some dark-coloured blood, and fancied it came from the throat. The bleeding recurred for a few days only, and was not attended by pain in the side. About three months later her nose bled profusely, she thinks more than a quart, and she was so much weakened as to be confined to her bed. The mother was alarmed, and resorted to a celebrated 'charmer.' The old woman did not visit the daughter, but merely took down her name on a piece of paper, over which she performed a sort of incantation, and then pronounced the bleeding to be stopped. This the mother found on her return to be the case; but on the evening of the same day the patient was covered with purple spots, the largest about the size of a pea. Her medical attendant was again summoned, and at the end of a week the spots disappeared. She soon felt quite well again, but precisely one month from her last illness the body became again covered with a similar eruption; the spitting of blood returned with it, and the inside of her mouth, the whole surface of the tongue and palate, was covered with dark spots. The gums bled on the slightest touch, and eating and swallowing became very painful. The bleeding continued for a week, but it was a fortnight before the mouth was well and free from spots. After the lapse of another month, to the very day, precisely the same symptoms occurred; and up to the date of her admission, the bleeding from the mouth had returned, with extraordinary precision, every month. It began on a Friday, and it last appeared on a Sunday, having varied only these three days in about a twelvemonth. She states the quantity of blood to be about the same on each occasion, and that its discharge continues one week, the mouth getting well after another week. There has been *one exception* to the uniformity of these periodical symptoms. About six months ago, on the day the hæmorrhage from the mouth was expected, a sanguineous vaginal discharge occurred; this increased the next day, and lasted for a fortnight. There was no bleeding from the mouth, neither was it sore, but the spots made their appearance, although of a lighter colour, and less numerous on the body.

On her admittance she made no complaint; the functions generally were healthily performed, and her condition merely indicated a degree of anæmia. The tongue was very pale and flabby; both its upper and under surfaces, together with the gums and inside of the cheeks, presented the same exsanguineous appearance.

The return of bleeding from the mouth was expected on the 22nd, and on that day the tongue had lost its pasty appearance, and had become redder, and more natural. She complained of violent pain across the loins.

On the 25th she awoke with a nasty taste in her mouth, and the saliva was tinged with blood. She also noticed spots over the chest and arms. These had increased in number and size at the time of the visit, (9 a.m.,) and the sputa then consisted entirely of dark blood. This formed a coagulum, if the mouth was not frequently cleared, on the upper surface of the tongue, and when this was scraped off numerous red papillæ were seen with bleeding points. The gums bled freely, but nothing abnormal was observable on the inside of the cheeks, or on the lower surface of the tongue, nor was the mouth sore.

On the 26th the lips were red, and some spots appeared on the lower. On the following day the spots were seen on the inside of the cheeks, fresh and larger ones appearing on the tongue, and the mouth becoming

very sore. The severe pain in the back passed off at this time.

New and larger spots were noticed on the 28th, whilst the old ones had faded; they were confined to the upper part of the body on this occasion. No further bleeding occurred, so that it had lasted during four days. Three or four days later little trace remained of the purpura; the tongue and mouth had become pale, and the general health as good as before the attack; so it continued till the next period arrived for this disturbance of the system.

December 24th. The lumbar pain was less on this occasion; the purpura more severe; the tongue presenting a larger bleeding surface; the elevations on the under lip amounting to bullæ, and the spots extending over the whole body, diminishing in size from above downwards, so that on the feet they were miliary. Her ordinary state of health was recovered within ten days, and she was then discharged at her own request.

I am indebted for the foregoing particulars to the minute and faithful record of the case drawn up by Mr. Gorringe, the Assistant House-Surgeon of the Infirmary. It would be useless to enter into the details of treatment. Mild alteratives, and chalybeate tonics were chiefly used during the intervals, and derivative emmenagogues at the monthly period. In the second attack a few leeches were applied near the vulva, and the bleeding was profuse and with some difficulty stopped. Electro-magnetism was tried, but was only once submitted to, as it caused considerable pain and more alarm. These and the other means used, produced no distinct modification of the symptoms, and the opportunity for treatment was unsatisfactorily curtailed.

Since she left the Infirmary, six months ago, our art has not I believe been much in requisition, but nature has been effecting important changes in the direction of the erethism of the minute blood-vessels. Mr. Nankivell, of St. Columb, the able surgeon who has been her ordinary attendant, has kindly enabled me to bring down the history of the patient to the present date, confirming at the same time the statements made by herself. Writing on the 13th, instant, he says—

"St. Columb, July, 13, 1847.

"My dear Dr. Barham,

"I have to-day seen Ann Teague; she looks worse than she ever did; is quite blanched. The uterus has in an abnormal measure parted the catamenia. Three months since she menstruated, and it continued for a week, being accompanied throughout with profuse bleeding from the nose, but *not from the gums*. Twice since then she has had hæmorrhagia (*without* epistaxis,) continuing for a fortnight. A week since she was again taken unwell, and fears that it will continue several days longer. There are about a dozen spots of purpura on the neck. You are aware, I think, that she menstruated once when 16 years old, and never since until recently, except vicariously. She thinks that since *that time* she has had the hæmorrhage from the gums about twelve times. She tells me that she passes many coagula. There is no leucorrhœa."

A case of hæmorrhage from superficial vessels, vicarious of the menses, occurs to my recollection, which was under my care as an out-patient at the Infirmary, about eight years ago. The patient was a girl about 20, who had an ulcer below the knee, from which a copious sanguineous exudation took place for some days monthly. The catamenia which had been for a considerable time suspended, did not return during several months, when she continued under my observation, and the ulcer remained unhealed. I speak of this case entirely from memory.

Another out-patient still under treatment, presents an affection of some superficial vessels of the left mamma of an analogous description, though less strongly marked with the evidence of substitution for the uterine discharge. She is a girl 20 years old, of robust form, though short, with fully developed mammæ. Menstruation is stated to have been regular and free in quantity, from the age of 16 to 18. It then was suddenly suspended, and has remained so, with the exception of a very transient appearance about ten days ago. She received a blow from a man's fist on the left breast, a twelvemonth since, and it then exhibited decided marks of the contusion; but they disappeared speedily, and it was not till six months after the bruise that they seemed, as it were, renewed on the same spot, and they have now for the last half-year alternately become vivid and receded, at no very regular intervals,—sometimes once, sometimes twice or more, in the week, varying from the appearance of purpura to that of ecchymosis. The part concerned is painful when the spots are high-coloured. There has not been very much constitutional disturbance, a painful fulness towards the left inguinal region being the chief amenorrhœal symptom, besides some of the ordinary results of plethora ad molem.

CASE OF SIMPLE FRACTURE AND DISLOCATION OF THE GREATER PORTION OF THE RIGHT ASTRAGALUS, FORWARDS AND OUTWARDS.

By Edward John Spry, Surgeon to the Royal Cornwall Infirmary.

(Read at the Annual Meeting of the South Western Branch of the Provincial Medical and Surgical Association, held at Truro, July 16, 1847.)

Thomas Rogers, a tall, muscular, and robust miner, aged 42, was brought to the Infirmary on the 24th of September, 1846, and was admitted under the care of Mr. Bull. From the statement made by the patient, it appeared that whilst at work in the morning of the day preceding, at Poldin Mine, in Gwennap, he had slipt from the end of a scaffold, about five or six feet high, and had fallen perpendicularly to the ground, the hollow of his right foot coming in contact with a large projecting stone, which caused him to be thrown on his right side. On attempting to stand, he found that he could place no weight on the injured foot, that it was distorted, and very painful. The surgeons of the mine were promptly on the spot, and endeavoured to restore the displaced parts, but without

success, and on the following day they sent him to the Infirmary, where he arrived about nine in the evening. The limb was then examined by Mr. Gorringe, our assistant surgeon, acting for Mr. Bull, and by my colleague, Mr. Bassett, who persevered for a considerable time in their attempts to reduce the dislocation with the aid of the pulleys, but with no better result than attended the former efforts.

The next morning, being at the Infirmary, I was requested to examine the limb, and ascertained its condition to be as follows :—

The foot was extended, the toes turned inwards, and the outer edge of the foot downwards, the foot being twisted inwards. There was considerable swelling of the soft parts, but the skin was not broken. The inner malleolus was deeply buried in the angle of adduction of the foot, and could only be felt with much difficulty, whilst the outer malleolus was remarkably prominent; and just below, and a little in front of it, there was a large projecting bony surface, immoveable, covered only by the skin, and a light effusion of serum in the cellular tissue. The foot, could be brought into a straight line with the tibia, and could be flexed to some extent without much effort; but immediately that the hand was removed, the parts resumed their former relative positions, and the patient had no control whatever over the limb. A slight crepitus could be felt on rotating the foot, when it was brought into the position last described, which had induced the impression that the inner malleolus had given way, and that the whole of the foot had been dislocated outwards. After a careful examination, I felt satisfied that there was no fracture of either malleolus; the partial mobility of the foot rendered it improbable that it was entirely dislocated; the well defined outline of the projecting bone suggested that it was some portion of the plantar arch, and that from its size and situation, it could be no other than the astragalus, but having never before seen an accident of this nature, I arrived at this conclusion with some diffidence, although there was no resisting the anatomical evidence thus supplied.

My colleagues concurring in these views, it was agreed that one attempt more should be made to restore the displaced bone, and that as the patient was very muscular and strong, he should be prepared for the process by a large bleeding, and by being kept fully under the action of the tartarized antimony for two or three hours. This was done, and the pulleys were again used most perseveringly, pressure being at the same time made on the projecting bone, but after continuing extension to the utmost degree that would be justifiable, the man being in the most favourable state for overcoming mere muscular resistance, we were satisfied that it was perfectly useless to go any farther. On removing the apparatus it was observed that the pressure on the outer surface of the foot had produced complete absorption of the effused fluid, and that the bone was only covered by the skin, which a mere touch with the knife would have divided; but as the attachments of the bone were uncertain, and it could not be ascertained at this time that it had been broken, it was thought best to leave the future management of the case to the natural efforts, as it was clear that the integuments must slough, and that in due time the bone might be separated.

To favour these efforts, the limb was placed on an inclined plane; fomentations were diligently applied, an anodyne was given, and he passed a good night. The pulse on the morning of the 26th being only 93; but little constitutional disturbance was excited. On the 29th the pulse was still 93; he felt easy, and the swelling gradually subsided. Vesications formed over the projecting bone.

October 2nd. From this time the sloughing process proceeded, which extended over the outer ankle; pulse 76. The patient's strength was duly supported by suitable diet and medicine. On the 6th the bone was partially uncovered; and on the 20th it was found to be so loose that Mr. Gorringe had no difficulty in detaching it after dividing only a little ligamentous tissue. A large cavity was of course left exposed, in which could be seen the concave articulating surface of the tibia. Some hæmorrhage ensued, which was readily suppressed by applying a pledget of lint and a roller.

The portion of bone removed proved to be the large convex articulating surface of the astragalus, broken off from the head of the bone, obliquely through its neck. It will be seen that the inner corner of the trochlea is carried away, showing pretty clearly that the foot must have been partially extended at the moment the shock was communicated to the limb, when, by the perpendicular and sudden descent of the patient, the whole weight of the body was received. On the upper and half-exposed surface of the astragalus, the anterior edge of the tibia acting like a chisel in cleaving the fracture, the foot being at the time prevented from yielding to the blow by being wedged up firmly with the projecting stone which occupied the plantar arch before described.

22nd. There is a great discharge from the cavity; the finger was carefully introduced, to ascertain if the other portion of bone was sufficiently loose to take away, but although its rough surface could be easily felt, it was too firm to remove, and it was considered best to make no further attempt to do so. This examination afforded an opportunity of verifying the opinion before given that the inner malleolus was quite sound.

24th. An abscess which had formed on the inner surface of the foot near the ankle was opened to-day, which gave him great relief. His strength was now so much reduced from the excessive discharge, that it was necessary to increase his allowance of porter to a quart daily, with four ounces of wine.

27th. This appeared to be the critical period in the history of the case. The discharge was excessive, his weakness was extreme, and it was much feared that amputation would be immediately required; but from this time the symptoms became more favourable, granulations appeared in the cavity and over the outer ankle, where the skin had given way. By gradually and carefully following out the principle of supporting his constitutional power, he had so far recovered on the 18th November as to be able to raise his leg a little

from the bed. The limb now rested on cushions in the extended position.

Dec. 16th. He has steadily improved, so that he is now able to sit up daily; the wounds are healing.

Jan. 1st., 1847. He is now able to walk about the ward with the help of crutches; the wounds are cicatrized; the limb is about an inch shorter than the other, and the foot is turned inwards, considerable prominence still remaining on the outer surface of the foot; he can, however, place some weight on his toes, and passive motion of the joint can be carried to some extent, without producing pain. He left the Infirmary the following day. I saw him again in June, when he was able to walk firmly on his right foot with the help of a stick, and was in very good health. The foot has an awkward appearance, but there is very useful motion in the ankle joint, which he thought had been gradually increasing.

As a proof of the rarity of this accident in Cornwall, it may be stated that I had never before met with it, although I have resided in this neighbourhood as pupil and practitioner about thirty years. Mr. Bull, who has been resident House Surgeon at the Infirmary since its opening in 1799, does not recollect the admission of any such accident. Several professional friends, to whom the casualties of many thousands of our miners are entrusted, have assured me that they had never seen a similar accident. I am indebted to the wood-cut in Mr. Bransby Cooper's edition* of Sir Astley's invaluable work on "Dislocations and Fractures of the Joints," for a very satisfactory representation of this particular accident, the outlines of which corresponded as accurately as possible with the *contour* of the limb in the present case; and to the publications† of my townsman, Mr. Turner, of Manchester, for much useful information respecting the management of a case in which I could not avoid feeling a considerable interest. Indeed, although Mr. Turner appears to have omitted nothing essential to make his description of the varied dislocations of the astragalus minutely correct, yet the case now detailed presents some peculiar characteristics, serving in the main to confirm the opinion he has formed, after a careful analysis of a large number of cases, namely, that a dislocation of the astragalus cannot take place without a fracture of some portion of the bone, and that when effected, its reduction is almost impracticable.

* Fifth edition, p. 322.

† *Vide* "Transactions" of the Provincial Medical and Surgical Association for 1843, Vol. XI, subsequently published as a separate Treatise in 1843.

ON THE USE OF THE NITRATE OF SILVER IN THE CURE OF ERYSIPELAS.

By JOHN HIGGINBOTTOM, F.R.C.S.E.

(Read before the Provincial Medical and Surgical Association, at the Anniversary Meeting, at Derby, Wednesday, August 4th, 1847.)

I have found that if the nitrate of silver be applied *early*, it subdues local inflammation and irritation, if we employ at the same time, the most efficient means for regulating the digestive organs.

At an early period of my practice, in slight cases of erysipelas, I used constitutional remedies alone, hoping that the inflammation would have been arrested; but having been so often disappointed, I now use both local and constitutional remedies simultaneously, and especially the nitrate of silver. Even in mild cases of erysipelas, in which I did not apply the nitrate of silver, I found the disease very long in duration, and I observed that the patients had sometimes numerous small abscesses requiring the use of the lancet, which might have been prevented altogether by the early application of the nitrate of silver.

The objections I formerly entertained to the very early application of the nitrate of silver, were the pain and the inconvenience attending the discolouration of the part on which it is applied, which remains for a week or more, but these objections are trifling compared with the continued severity of the disease, if permitted to run its usual course, particularly on the head, in which there is also great danger of inflammation of the membranes of the brain and of serous effusion. I have found that when the inflammation has been subdued by an early use of the nitrate of silver, the constitutional symptoms were immediately relieved, the constitutional disturbance is directly aggravated by the least increase of local inflammation, and in a few hours, after a decided application of the nitrate of silver, the inflammation is arrested and gradually subdued, and with it the constitutional symptoms cease.

Even in idiopathic erysipelas, there is no period of the disease when I would not apply the nitrate of silver. I have never in any cases seen metastasis, or any other bad effect from the use of this important remedy.

When it is necessary to apply the nitrate of silver over an extensive surface as in erysipelas, I have for some years used the concentrated solution in the manner proposed by Mr. John Gooch, Surgeon, R.N., in a paper published in the *Lancet* of September 15th, 1832, entitled "Practical remarks on Erysipelas as it appeared on board His Majesty's ship *Prince Regent*." The strength of the solution is not given in this paper; I prescribe it in the following manner:—

R.	Argenti Nitratis	scr. iv.
	Acidi Nitrici	gtt. vj.
	Aquæ Destillatæ	oz. iv.

In erysipelas of the face when it is spreading on the forehead, or at all on the scalp, the head should be shaved as early as possible, in order that we may trace the extent of the inflammation on the scalp, which often can only be detected by pain, or by an œdema being felt on pressure with the finger. The affected part should be well washed with soap and water to remove any oily substance from the skin, and afterwards with pure water, to wash away any particle of soap remaining. The concentrated solution may be then

applied several times on the inflamed part and for two or three inches beyond the inflamed margin on the healthy skin. It requires to be applied very freely all over the scalp, where it scarcely or never produces vesication.

In about twelve hours it will be seen if the solution has been well applied. If any inflamed spot be unaffected by it, it must be immediately re-applied to it. Sometimes even after the most decided application of the nitrate of silver the inflammation may spread, but it is then generally much less severe, and it is eventually checked by the repeated application of this remedy. I have in some cases of traumatic erysipelas, found the inflammation to spread more severely and more rapidly than in the idiopathic, but by the free repeated application of the nitrate of silver, it has at length been subdued.

The following cases are selected to illustrate this mode of treatment:—

Case I.

On the 6th of August, 1844, I visited Miss A., 20 years of age, of very delicate constitution, and of a strumous diathesis. She had been exposed to the rain, and had neglected to change her damp clothing. She experienced the common symptoms attending a cold, accompanied by a slight erysipelatous inflammation of the right side of the cheek and nose. The constitutional symptoms were so slight, and the pulse so little accelerated, that I wished to avoid the application of the nitrate of silver, thinking the inflammation might be subdued by other remedies. I directed thirty grains of ipecacuanha as an emetic, and in three hours after its operation two pills, containing three grains of chloride of mercury, and eight grains of the compound extract of colocynth, followed by a purgative of salts and senna, repeated every three hours until it had operated freely.

7th. Early the following morning, although the emetic and purgative had operated satisfactorily, she was labouring under a severe attack of fever; the pulse was 140, and the erysipelas had spread considerably on her face and forehead, and slightly on her scalp. I opened a vein in the arm, and bled her in the semi-recumbent position to the amount of twelve ounces, when she became faint. Her head being shaved, the concentrated solution of the nitrate of silver was applied upon and beyond the whole of the inflamed surface, and also around the ears, to prevent them becoming inflamed. I applied it very freely over one half of the scalp, thinking this might be sufficient, as only a small portion of the forehead was affected. I prescribed two grains of the chloride of mercury, with two of antimonial powder, every six hours.

There appeared no increase of the inflammation on the 8th, and the pulse, 120; the bowels had been well moved.

9th. She had a restless feverish night, attended with slight delirium, the pulse being 120. There was no increase of erysipelas on the face, but it was spreading on the remaining part of the scalp. I applied the solution of the nitrate of silver over the remaining part of the scalp. Neither of the ears were in the least affected. The solution of the nitrate of silver had apparently formed a barrier, over which the erysipelas did not spread.

On the 10th the patient was in every respect improving.

From this time Miss A. recovered without interruption.

Case II.

I visited Miss B., aged 30 years, on the evening of the 18th of December, 1843. She had been indisposed several weeks. There were considerable fever, a quick pulse, and pain of the head, and she had a patch of erysipelas on the upper part of the nose, and a little across the lower part of the forehead. I prescribed an emetic of ipecacuanha, followed by a dose of chloride of mercury and compound extract of colocynth, and the sulphate of magnesia in infusion of senna.

On the morning of the 19th, the erysipelas had spread all over the face, and as high as the forehead, close to the scalp, and there was no abatement of the constitutional symptoms. I bled her whilst sitting up in bed until she fainted, and directed the head to be shaved, and I then applied the solution of the nitrate of silver all over the face, and one half of the scalp. In the evening I applied the solution of the nitrate of silver over the remaining part of the scalp; having found that one ear had become inflamed, I applied the solution both upon it and around the other ear affected.

20th. The fever was considerably abated; the pulse was 100. From this day the patient was convalescent.

Case III.

I visited Miss C., aged 20 years, on the 14th of September, 1844. She had a sense of coldness and pain of the limbs the day before; she had then a slight degree of erysipelas on the left side of the nose, cheek, and upper lip. I directed an emetic and pill, with the compound colocynth powder and chloride of mercury, followed by an active dose of infusion of senna and sulphate of magnesia.

In the evening I found the erysipelas increased and spreading towards the ear; the lower eyelid was considerably swollen, but the erysipelas had not reached the forehead; pulse 100; no pain of the head. I applied the strong solution of the nitrate of silver all over the inflamed surface and the surrounding healthy skin for several inches, particularly around the ear. A grain and a half of chloride of mercury, with two grains of the antimonial powder, was given every six hours, and a saline effervescing medicine every three hours.

16th. The application had been effectual, and there was no increase of the erysipelas; the pulse was 80.

Case IV.

Mr. J. S., aged 30 years, had slight febrile symptoms on the 11th of December, 1843, which arose from exposure to cold. He had taken aperients and saline medicines. Two days afterwards there was a patch of erysipelatous inflammation on the right side of the face, without any considerable increase of fever. The

nitrate of silver was well applied on the inflamed part, and on the surrounding skin. There was no further extension of erysipelas.

It will be observed in the two last cases, when the nitrate of silver was promptly applied, before the erysipelas had produced severe constitutional symptoms, that the progress of the disease was instantly arrested, and that the patients speedily recovered. In the case of Miss B———, although the erysipelas at first was suffered to proceed, the application of the nitrate of silver to the whole scalp prevented any cerebral affection, and the patient was convalescent in a short time. In the first case related there were restlessness and delirium fifteen hours after the application of the nitrate of silver, but it was observed that the scalp where the nitrate of silver had not been applied was inflamed, and on the decided application of the nitrate of silver on the whole of the scalp, the delirium ceased. From these cases, as well as from my experience of many years, I conclude that the speedy application of the nitrate of silver will arrest the progress of erysipelas, and prevent cerebral mischief. It is also of great practical importance to subdue erysipelatous inflammation in the commencement, for I have observed when the attacks have been severe, that the patients afterwards become more subject to a recurrence of the disease.

The great obstacle to the general and free use of the nitrate of silver, even at the present day, appears to arise from the impression on the minds of many surgeons that it is a caustic—a destructive agent. If they could be divested of that idea, and use it as freely as they would a common blister of cantharides, their fears would soon subside, from repeatedly observing the safety of the application, and also its beneficial effects. In my own practice I have always considered it a safer remedy than cantharides, as it may be applied freely over a surface, even where very active inflammation exists, or where there is an extensive surface denuded of its cuticle. This remedy has also the advantage of not affecting the bladder, or producing strangury.

The nitrate of silver is not a caustic in any sense of the word. It subdues inflammation, and induces resolution and the healing process. It preserves, and does not destroy, the part to which it is applied. If we compare a caustic, as the hydrate of potassa, with the nitrate of silver, we find that the hydrate of potassa destroys and induces a slough and the ulcerative process; but if we touch a part with the nitrate of silver, the eschar remains for a time, and then falls off, leaving the subsequent parts healed.

If an ulcerated surface secreting pus be touched by the nitrate of silver, the succeeding discharge is immediately converted into lymph; it is the property of the hydrate of potassa, on the contrary, to induce, not only ulceration but suppuration. In short, the peculiar properties of the nitrate of silver have long been kept unknown to us by the designation of lunar caustic, affording the most striking instance of the influence of a term, or of a classification, upon the human mind. The nitrate of silver and the hydrate of potassa, (as indeed all caustics,) are as the poles to each other, the first preserves the second destroys; the first induces cicatrization, the second ulceration.

Nottingham, July 27th, 1847.

ON THE TREATMENT OF BURNS AND SCALDS.

By Clement Carlyon, M.D., Truro.

The paper of Dr. Payne, of Nottingham, in a late number of the *Provincial Medical and Surgical Journal*, relative to the use of treacle as an application to burns, is borne out in all its recommendations, by my experience of an analogous mode of treatment.

The main object appears to be the complete exclusion of the air from the scalded or burnt surface. The circumstance of a negro child, which had fallen into a vessel of boiling molasses, having been snatched from death, and almost from suffering, by being immediately plunged into a heap of cotton, which adhered to every portion of the skin and thereby excluded all excess of air, is well known. The result was perfect recovery without the application of any further means whatever. So extraordinary a case drew the attention of the faculty to the *modus operandi* of the cotton. It was agreed that the total exclusion of air from the injured parts was the chief thing; and from that time (half a century ago) to the present, this has been, more or less, the governing principle in the treatment of fearful accidents. Where nothing better is at hand, powdering the parts thoroughly with flour has been found to answer well. Time out of mind it had been the practice to use neutral cerates and liniments, (such as oil and lime-water) in these cases; and they still continued to be extensively used, but their efficacy is far inferior to that of the agent recommended by Dr. Payne, or to that of clarified honey.

Whenever the latter could be procured, I have invariably recommended it, smearing the scalded surface with it in a luke-warm state, and then covering the parts with cotton, cotton-wadding, or lint. I have had no experience of the use of treacle, but I have often said if honey be not at hand, use treacle. The fact is, that honey, even when clarified, which improves and facilitates its application, is of the two, the more perfect shield; and where the injury has been superficial, whether the cuticle has been removed or not, it may not even be necessary to repeat the application. After the application of the honey and cotton-wadding, attention should invariably be directed to the temperature of the part, so as to reduce it or raise it by the application of damp cloths and pledgets of linen.

In cases of no great severity, this is all that will be required to be done; it being merely necessary to continue the covering till the total absence of pain and

tenderness indicates a return to the healthy state. In those dreadful cases, which are too frequently occurring, where the very powers of life are shaken and succumb, it must be obvious that so simple a mode of procedure would be unavailing. The treatment ought, of course, to vary with the attendant circumstances, regard being nevertheless had to the vast importance of protecting the injured parts as much as possible from the access of air. I was once desired to step into a cottage, by which I was passing, to see a child, four or five years of age, the lower half of whose person was literally burnt to death; the skin was as hard as the hardest leather, from about the navel downwards, whilst all above had a natural appearance. There was no expression of uneasiness in the child's countenance, and to my astonishment, a bit of gingerbread was eaten readily and with apparent gratification. There was no perceptible pulse, no manner of chance of life being prolonged beyond a very brief period,—she in fact lived for about an hour from the time I first saw her. It is evident that in this instance no application could have done the least good; and between such cases and the mildest that occur, there will be an incalculable gradation. When particular methods of treatment therefore are recommended, regard must be had to the limits within which they can reasonably be expected to be of service.

In all cases of breach of surface, from the most trifling abrasion of the cuticle, (to which the application of a bit of white-brown paper is better than any other,) to the most extensive ulceration, there is no indication of cure so important as that of the exclusion of air. In the course of a long continued practice, I have witnessed many cases of traumatic tetanus, but I do not recollect an instance where the precaution of keeping the wounded or ulcerated parts well together, and well covered and protected from the access of the external air, had been sufficiently attended to.

Some years since, a good deal was written about the efficacy of the balsam of Peru, as an application to painful ulcers, and to parts approaching to a state of mortification; such, for instance, as Pott's well known cases of mortifying extremities. It is to that eminent surgeon we were first indebted for the substitution of a lenient mode of treatment for severe measures in these cases, which are often dependent on irremediable causes, and admit only of palliative treatment. But I have seen, again and again, most surprising benefit to arise from anointing the parts, even when extensively discoloured, and almost black, with clarified honey; carefully covering them, when so anointed, with folds of cotton-wadding, and placing them in the easiest possible position. The inunction will require to be repeated at intervals of one or more days; and the greatest care must be taken to envelope the parts well with the cotton. By this simple mode of treatment the living colour has returned, and the parts have been preserved under circumstances which were deemed hopeless. In such cases the balsam of Peru might be too stimulant; but, if honey were not at hand, I would recommend treacle as its substitute.

It will occur to the experienced practitioner, without any further suggestions from me, that the same practice is applicable to a variety of local affections, such (*e.g.*) as ulcerated chilblains, &c., where the affected parts are weak and irritable.

Hospital Reports.

ST. PANCRAS DISPENSARY.

CASES ILLUSTRATIVE OF THE CONDITION OF THE SYSTEM WHICH IS ACCOMPANIED BY OXALIC URINE.

By Edward Ballard, M.D., Lond., Physician to the St. Pancras Royal General Dispensary, and Medical Tutor in University College, London.

(*Continued from page* 409.)

Case VI.—Chronic Rheumatism.

A. L., aged 28 years, presenting no hereditary tendency whatever to disease, has been married nine years, and in that time has had four children and one miscarriage. She nursed her two first children from eighteen months to two years, and has had one at her breast now for more than a twelvemonth; applied at the Dispensary on the 18th of June, 1816. It appears that for more than two years she has been the subject of painful swelling of the small joints of the hands and feet. Her illness commenced shortly after the birth of her third child, in consequence of exposure to the draughts of air and dampness of a washhouse, with pains in all the joints, large and small, of a severe kind, but without any redness or swelling, and without any febrile disturbance. As these pains left her, the small joints of the hands began one by one to be affected with pain, redness and swelling; and from time to time the metatarso-phalangal joints of the feet became similarly affected. At present all the smaller joints of the hands and the metatarso-phalangal joints of the feet are painful, tender, and swollen; in those of the hands which have been more recently affected there is mobility, with redness and more or less fluctuation, while those which have been longest affected are incapable of being fully extended are not red, and do not appear to contain fluid, but are heard to crack on being freely moved. The heels are also tender and painful, the wrists and ankles swollen and painful, but not red; and there are pain and tenderness in the legs, knees, thighs, hips, arms, elbows, and shoulders. All these pains are relieved by warmth. She feels languid and weak, and is frequently chilly in the mornings. Has occasional pain across the loins; her appetite is defective, but there is very little thirst; bowels open; tongue presents a slight whitish fur; pulse 95; small and weak; urine full-coloured, acid, specific gravity 1031, rather cloudy, with a moderate cloud-like sediment, consisting almost entirely of octohedra, some of them being very minute. No albumen. Ordered to wean her infant. R. Potassii Bromidi, gr. iij.; Inf. Calumbæ, oz. iss. Fiat haust. quartis horis sumend.

25th. Pain considerably improved, has put on her boots this morning which she has not been able to do for the last fortnight. Urine four pints in the

last twenty-four hours, pale, acid, specific gaavity 1015, containing no octohedra. The Bromide of Potassium has been increased to five grains.

June 30th. Was exposed to a draught on the 27th, and since then has suffered from headache, tenderness of the scalp, and increase of all her pains, but does not feel so languid in the mornings. Auge Potassii Bromidum, ad gr. viij.

July 1st. Urine passed this morning, specific gravity 1025, contains an abundance of octohedra.

8th. No improvement; urine of specific gravity 1025, contains very few octohedra. Omit. Med. R. Potassii Iodidi, gr. v.; Inf. Calumbæ, oz. iss., ter die sumend.

14th. Much the same; urine in all respects as on the 8th. Auge Potas. Iod., ad gr. viij.

24th. Pains have not been any better; urine has up to this time been of lower specific gravity, that of the last twenty-four hours 1019; octohedra remain small and few. Omit. Med. R. Vini Colchici, m. xx.; Aq. Menth. Pip. oz. iss. Fiat haust ter die sumend.

29th. Has not improved so far as the extremities are concerned, but there has been less pain in the head. Urine of last twenty-four hours, four pints, cloudy, with a cloud-like deposit occupying one-third of its bulk, specific gravity 1029, re-action very acid. The deposit contained an abundance of moderately large octohedra. Auge Vin. Colchici, ad dr. ss.

August 10th. Finds her general health improved, and with the exception of the arms the pains are all better. Head and eyes were very painful yesterday. Urine contains very few octohedra. Auge Vin. Colchici, ad m. xlv.

20th. Medicine purged her from the 14th to the 18th, and from this time the pain became less violent and the headache ceased. Urine of last twenty-four hours cloudy, with a cloudy deposit, containing an abundance of octohedra some very large, some aggregated; re-action acid, specific gravity 1030. Omit medicine.

25th. The arms have have been more painful since the omission of the medicine; has taken a fresh cold and has suffered a febrile attack with headache and vomiting. Urine contained abundance of octohedra as before, with a slight excess of lithate of ammonia. To resume medicine, with Vin. Colch., dr. ss.

September 7th. Pains have been less for the last week. The urine of the 4th was of specific gravity 1016, and contained only a few octohedra.

11th. Has had no medicine since last report, and pains have been worse. No octohedra in this morning's urine.

Oct. 13th. Has been very little better up to this date, but is improved in general strength. The urine examined from time to time was found to contain no octohedra. Contin. haust; R. Tinct. Aconite, oz. ss; Linim. Saponis, oz. iss. Fiat Linim. partibus dol. infric.

29th. Finds relief from the use of the liniment; suffered for the last week from rheumatic pains affecting the side of face and jaw; general health improved; urine of this morning of natural colour, with a moderate very light cloud at the bottom, consisting of an abundance of octohedra; re-action strongly acid; specific gravity, 1023. Discharged.

Remarks.—Rheumatism, especially chronic rheumatism, and still more particularly that form of it which manifests its alliance to gout, by attacking the small joints in preference to the large ones, is not commonly met with in persons previously in robust health, but apparently requires for its development a constitutional predisposition, derived from hereditary or chronic debilitating causes. Perhaps it is for this reason that chronic rheumatism is so difficult to deal with, and frequently so little under the influence of remedial agencies. Perhaps it is on this account also that oxalate of lime, though by no means constantly excreted with the urine, is so, not uncommonly, during its progress. Chronic rheumatism is familiar to every one as a sequel of the acute, but it may also be chronic from the first; in other words, there may be no febrile disturbance to mark its origin, and the only perceptible ailment may be debility, conjoined with the local disease. An example of this most obstinate and intractable form is displayed in the case before us. The patient attributed her illness to the operation of cold and wet, which no doubt co-operated with the tendency derived from the debilitating influence of over-lactation, &c., in the production of the disease. She appeared to be benefitted at first by the administration of the bromide of potassium; but this, as well as the iodide, failed to give relief when her complaint was exaggerated by renewed exposure. Colchicum produced more permanent relief, and its full effect was followed not by a diminution, but by a remarkable increase of the oxalic deposits. Whether the less violent operation of that medicine had any thing to do with the ultimate disappearance of the oxalate from the urine, I may be permitted to doubt, in consequence of having observed another remarkable coincidence as respects the atmospheric temperature and the barometric pressure. When these were high, and especially when they suddenly rose, the oxalates discharged became abundant, while the opposite states were followed by a corresponding diminution. Much mischief has been done to scientific medicine by the stress which has been laid upon individual coincidence; but, for all that, every step which it takes in advance is founded upon an accumulation of them. I cannot say that I can bring a parallel from my recorded experience to assist in placing a value on this observation, although in two instances I have seen something approaching it. But nevertheless I feel justified in directing to it the attention of those who may feel interested in the existence of oxalate of lime in the urine, since if sufficient instances are collected, we may be assisted in explaining some of those variations in its quantity which are well known to occur independently of variations in a disease.

Case VII.—Lumbago.

C. B., aged 63 years, by occupation a charwoman, badly off in her circumstances, and unable to procure a sufficiently nutritious diet, applied at the Dispensary on August 18th, 1846. She states that three weeks ago she did an unusually hard day's work, connected with much stooping, the windows of the rooms being constantly open. The following night she had no sleep, and in the morning was attacked with pain of

a shooting character through the loins, extending down the back part of the thighs to the calves of the legs. She never suffered from rheumatism before. At the present time the pain is limited to the loins and calves of the legs; is worse by day than by night, appearing to be relieved by the warmth of the bed. It gives her great pain to stoop or raise herself from the stooping posture. There is some tenderness in the loins, and that part is copiously perspiring. She is pale, weak, and desponding; the only feverish symptom which she has is a sense of heat in the palm of the hands, and over the abdomen. She has lost her appetite, and her bowels are habitually costive. Three days ago she had some watery sour eructations for the first time in her life. She states that her urine is scanty, but not opake. Ordered R. Calomel, gr. iij; Pulv. Zingib., gr. ij.; Pulv. Jalapæ, gr. xv.; Fiat pulv. statim sumend. R. Beeberinæ Sulph., gr. v.; Ext. Gent., q. s., pro pil ter die sumend.

25th. The lumbar pains she considers more severe, but those in the calves have disappeared. She got her feet wet two days after I saw her, and has suffered from coryza and cough since. Appetite is improving, and there has been no return of the eructations; bowels have been freely purged. Continue pil.; Omni nocte sumat Pil. Rhei. Co., gr. x.; Applic. Empl. Picis lumbis.

Sept. 1st. The lumbar pain has been very severe, but is much less so now; catarrh is lessening; states that her urine has been very high coloured; bowels insufficiently acted on. Repet. Pulv. Cathartic, alternis diebus. Contin. Pil. Bebeerinæ.

4th. Considers herself stronger; catarrh has not quite disappeared; lumbar pains distinctly less and less constant; urine passed this morning cloudy, but rather high coloured, depositing a very abundant dense fawn-coloured sediment; specific gravity, 1026; reaction acid; no albumen. The deposit consists of lithate of ammonia, entangling and concealing an abundance of octohedra, of large size, both separate and aggregated, which became obvious on warming it. Continue Pulv. Cathartic and Pil.

8th. Still some lumbar pain remaining. Two days ago vomited some watery matter after eating some fat food; bowels not sufficiently acted upon. Continue Pil. Bebeerinæ. R. Olei. Crotonis gtt., ij.; Micæ panis q. s. pro. pil., viij.; Capt. j., omni nocte.

11th. Bowels act regularly twice a-day; lumbar pains disappearing; some cough remaining still; urine has not been opake since the specimen examined on the 4th; that passed this morning is rather pale, slightly cloudy, and presents a slight cloud-like deposit, which contains some circular thin plates, with concentric markings, but no octohedra; specific gravity 1011.

15th. Has no pain worth mentioning, but is still low-spirited; bowels act once daily; urine contains no oxalates or other saline deposit.

18th. Is much stronger, and can walk with much less fatigue; is less low-spirited, and complains only of slight weakness of the ankles; appetite improving; bowels regular; urine presents no oxalates or other saline deposit.—Discharged.

Remarks.—I would direct attention here to the seat which the rheumatism occupied in reference to the ordinary employments in which she was engaged. The stooping posture, predisposed to lumbago, rather than articular rheumatism, on exposure to an exciting cause on the principle which hospital practice frequently illustrates that, parts which are most exerted are commonly those first or even solely attacked with the disease, or at any rate they are those which suffers from it most severely. I have seen this illustrated in the University College Hospital, in the case of the upper extremities being preferred by the disease to the lower, or one arm selected by it rather than the other. Dr. Williams notices the same phenomenon in his valuable work on the "Principles of Medicine," referring it with great probability to the retention of some of the products of the transformation of the muscular textures, the elimination of which the system frequently attempts, as in the present case, by the establishment of local sweats.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, AUGUST 25, 1847.

The proceedings at the Anniversary Meeting of the Provincial Medical and Surgical Association at Derby, were highly satisfactory, and in reference to several subjects of importance to the welfare of the Association, presented features of considerable interest. Upon some of these we shall hereafter find opportunity to enlarge, but on the present occasion we are more particularly desirous of directing attention to that part of the proceedings which has reference to the treatment of the Medical Officers of Poor-Law Unions. The subject was, on this occasion, formally introduced to the notice of the Association by a deputation from a meeting of gentlemen holding these appointments, which had recently been held at Matlock Bath, and the resolutions passed at that meeting, on the question of the remuneration of the Union Medical Officers for their services, and the treatment experienced by them from the Poor-Law authorities, were read and ably supported by Mr. Cantrell and Mr. Tasker, two of the deputation.

The statements of these gentlemen were listened to with deep interest, and evidently made a considerable impression, calling forth the sympathies, not only of those who had suffered or were suffering under like indignities and injustice, but also, we believe, of almost every gentleman present. The response which was made to this statement by Mr. Douglas Fox, Dr. Conolly, Dr. Hodgkin, Dr. Hutchinson, and other gentlemen, though not themselves personally interested in the subject, yet of the highest reputation for genuine benevolence, and

for the exercise of those principles of humanity and consideration for the poor, which have ever distinguished the brightest ornaments of the profession, must have been highly gratifying to the deputation, and the consent of two of these gentlemen to act on the Committee then appointed to watch over the question, to aid by their counsel and influence in following out the objects of it, appears to us of much importance at this juncture, when the time is apparently approaching in which a struggle must be made for the attainment of something like equity in the dealings of public authorities with members of the medical profession.

We are aware that some eminent individuals are of opinion that these questions should be left to find their own level; that the medical man should be ready to give his services to whomsoever may seek them, and that when these services are to be exerted in favour of the poor the consideration of remuneration should not be prominently brought forward. Again, it is urged that the gratuitous services of the physician or surgeon, in private, and at public institutions, have ever been cheerfully awarded, and moreover, that in the latter case there is a *quid pro quo* which renders honorary medical and surgical appointments at these institutions objects of desire, and for which keen contests not unfrequently take place.

This question is indeed raised in another column by an esteemed member of our Association, but there is a fallacy in the statement of it which lies at the root of every argument which we have seen or heard advanced on the subject. It is perfectly true that Hospital and Dispensary appointments are coveted by the profession from various and mixed motives,—for the opportunities which they afford for studying disease,—for the standing which they confer, &c. &c.,—as well as for the exercise of those feelings of benevolence which are most grateful to the genuine philanthropist. But then the seeking after such appointments is in the first place entirely and purely voluntary, whatever may be the motive which influences; and in the next place, the appointments are honorary, and the institutions being in essence, charitable and private, there can be no claim on the governors for more than for that estimation which must always follow when the duty is ably and efficiently performed. The subscribers to such institutions, contribute their mite of benevolence after one fashion,—their one, two, or twenty guineas annually, as the case may be: the medical officers bestow their aid after another fashion,—their advice, the exercise of their professional skill, and their time. Each party does, according to his ability, voluntarily, and at his own free cost, whether in money or in that which is more valuable, contribute to the support of the medical charity. But in the case of the Union appointments, where is the honour which should lead medical men to covet them? Where is the benevolent feeling, which, exercised in their establishment, should confer on such appointments claims to consideration? Where is the freedom of choice left to the medical man, as to whether he shall or shall not consent to hold them? Is he not compelled to undertake these duties, onerous and irksome often in the extreme, by the threat of competition in his private practice,—in his struggle for a maintenance for himself and family? Instead of the daily visit to the wards of a hospital, where all his patients are collected, and all appliances of food and medicines properly provided, for the exercise of medical and surgical skill under every advantage, is he not compelled to traverse an extensive district, exposed to the inclemencies of weather,—to enter the abodes of wretchedness often reeking with infectious disease, himself enfeebled with fatigue,—to provide and dispense the necessary medicines,—to wring from Boards of Guardians the necessary food,—to record his cases,—to submit his statements to the criticism of men incapable of comprehending them,—to supply returns when called for, and to perform a hundred other offices, and all for a miserable pittance, which in most cases can barely, if indeed it do so at all, cover his expenses. Where, then, is the analogy between these cases? Where is the honour or advantage, at least in a worldly point of view, which can attach to the Union appointment?

The Union medical officer, who does his duty, whether rewarded or not, must exercise more self denial, must be called upon in a far higher degree to administer from genuine benevolence to his fellow creatures, than either the hospital physician or surgeon; but the threat of compulsion is held out to him, and the exercise of his calling is paid for; some threepence-halfpenny per visit is awarded him; his appointment is consequently not an honorary one, and his unwearied exertions, his skill, his time, are hired by the public, and he is subjected to inquisition in the discharge of his duties, and held responsible to those who are unable to appreciate him, and after years of faithful service, is perhaps at last dismissed from office because some younger and less experienced man will take the same at a trifle less.

Now, it is easy to say that it is the gratuitous exercise of certain honorary and esteemed appointments which leads to this undervaluing of the services of the Union Medical Officers, but

we repeat the cases are by no means parallel. It is equally easy to allege, and it must be owned with some shew of reason, that the fault is in the medical men—that they are not true to themselves; but does that justify the public? These are not cases of private benevolence, and where the acceptation of office is purely voluntary, but the appointments are public, intended for the relief of the public purse, as well as for the benefit of the sick poor, and the services rendered are as much entitled to a fair and equitable remuneration as are those of any other department of the public service.

What would be thought of a medical military appointment to be thus announced in the *Gazette*:—

"— Royal Regiment of Horse Guards —. To be Surgeon, Mr. Thomas Smith, of University College, London, at a salary of sixpence per day, instead of George Gulliver, Esq., *superseded*, as declining to take less than the customary regimental allowance."

Yet is this virtually done with Union appointments, and it might be done with equal readiness with military appointments were the Government authorities so disposed, and be extended to other departments than the medical. But no, the Government are herein wiser in their generation. The salaries of public officers, of whatever rank, are fixed, and fitting appointments are made accordingly, and honours and rewards given in addition, to such as meritoriously discharge the duties of them. Why then should the public be so ready to take advantage in the case of medical men alone, of a competition which would be exercised, were it permitted to be so, in every department of the public service? why should the injustice be perpetrated here, and here only, of compelling the services of able and experienced men, often too, at the risk of life? We leave it to the political casuist to answer if he can, while we would urge upon the members of the medical profession generally, whatever may be their standing, to make common cause in the matter, and to endeavour to obtain from the public due recognition of all public services rendered by the profession, and such adequate remuneration for them as they are justly and honourably entitled to.

Proceedings of Societies.

SOUTH-WESTERN BRANCH OF THE PROVINCIAL MEDICAL & SURGICAL ASSOCIATION.

ANNUAL MEETING.

On Friday, the 16th of July, 1847, the meeting of this Branch Association was held at the Royal Institution of Cornwall, Truro.

Amongst those who were present were C. Barham, M.D., Truro; E. J. Spry, Esq., Truro; R. H. Williams, Esq., Truro; R. L. Pennell, M.D., Exeter; C. Carlyon, M.D., Truro; W. D. Kingdon, M.D., Exeter; J. L. Kirkness, Esq., Truro; W. G. Gorringe, Esq., Royal Cornwall Infirmary; J. R. Quick, Esq., St. Just; Alex. Paul, Esq., Truro, &c.

Dr. C. Barham took the chair in the absence of Mr. Barnes, of Exeter, the retiring President, a letter from whom having been read by the Secretary, expressing his regret at not being able to attend, Dr. C. Barham, the President, addressed the meeting as follows:—

Gentlemen,—My first duty is to express the regret I feel that our late President, Mr. Barnes, is not here to open our proceedings. Those who know that gentleman best will best appreciate our loss. It is, however, a satisfaction to those who witnessed the able manner in which he performed his duties last year, at Exeter, to be quite sure that the effects of age, to which he himself has alluded, have very little to do with his absence. In acting as his successor, I am fully aware that it is purely the consequence of my having been the oldest member of the Association in this town, which, from its containing the County Hospital, may be called the medical capital of Cornwall, that I have the honour of filling this chair. It was considered by the Council, and I think justly, though I had no share in suggesting such an arrangement, that to hold an annual meeting here in the far west would probably tend to make the Association better known, and consequently better supported among the medical men of Cornwall; and in fact the number of members was about doubled in the county after this decision was adopted; and though they even now amount only to twenty-three, not a sixth part of the total members of this Branch, and we cannot therefore wonder that our meeting is a small one, still we may be confident, and indeed have already had proof, that the design of the Council in, as it were, forcing the Association on the attention of the profession in this part of England, will be successful.

Time will not allow of my enlarging, as I might desire, under the circumstances just now referred to, on the merits of the Association; I must content myself with stating them very summarily. In my own humble opinion, the central Association, together with its Branches, fulfils, or is capable of fulfilling, everything that can reasonably be hoped for from the combination of provincial practitioners. The principles and designs laid down by the original founders of the Association were sound; and I can assert, having watched their working with interest for many years, that they have been firmly adhered to, and judiciously carried out. One great object in the constitution of the Association as a whole, is to give a rallying point for the profession in the country, when its general interests are at stake. In this relation it seems to me that good service has been done by it, the proper middle course having been kept between the advocacy of innovation, because things were new, and the support of old things, because they were

old. Again, by its publications it has done, and does, what no merely local society could effect,—collecting to a focus the scattered lights of the provinces, and giving them forth again to each member in a mode which makes him possess in them a sort of personal property; and no one, I think, can doubt that the amount of productiveness of our country doctors has been greatly increased since this publicity has been given to their researches. Good has likewise been done, and much more may be, by the pecuniary aid, as well as the direction, afforded to particular investigations. When we look at the Branches, we find that they effect all the purposes of local clubs, at the same time deriving honour and stability from the parent stock. They are of a convenient size for the social cultivation of our science and art, and of natural good fellowship; and as has been lately proved at Taunton, they may be rendered very effective in strengthening the hands of private practitioners for the detection and punishment of professional fraud, and the suppression of quackery. On my Cornish brethren, I would especially urge the claims of our Branch, for nowhere does the barrier of remoteness more effectually check the intercourse of medical men with the more central positions of the profession, and consequently it is to none more grateful to devote a holiday now and then, (few and far between they must be,) to scientific and social intercourse with those—some of them probably old friends—who have been acting in a sphere in one way or other different from our own. I will also freely say, that owing to the particular employments prevalent in this county, partly too to the independence of our surgeons on extraneous aid, the frequency and dangerous character of injuries, and the extent of practical skill brought to bear on their treatment, are nowhere exceeded; and that, consequently, the experience of every one around us can furnish valuable contributions to our Journal,—in fact they ought not to be withheld.

A very cursory glance at the medical history of the past year will be sufficient. At one time there appeared to be a probability of considerable changes in the relations of the profession, internal and external. But it is needless to discuss the merits either of the Registration Bill, which was differently viewed by different Branches; or of the Health of Towns' Bill, which would certainly have constituted one step in placing our profession in legitimate connection with the State, both measures having shared the fate of preceding medical legislation. To attempt any retrospect of practice, would on this occasion be absurd, but I should not be justified in passing without mention a fact so very remarkable as the introduction of the inhalation of æther in connection with operative surgery. It would not become me to pronounce judgment on its merits in any decisive tone, whilst surgeons of acknowledged eminence entertain differing opinions on the subject; but I must state the fact, that in our hospital here, and in this neighbourhood, this novel agency has been employed in a great variety of instances, many of them being capital operations, with such uniformly satisfactory results, that were I to form my estimate from these cases alone, I should consider the introduction of this practice as a boon of a high order, almost without drawback, to suffering humanity.

In the history of the Association during the past year the most prominent event perhaps is the change effected in the frequency of publication, and in the character of the Journal. When the question whether the Journal should even be continued was submitted to a committee, I felt that the question of the existence of the Association itself was really agitated, so firmly am I persuaded that it is the bond which keeps us together, the perpetual refresher of the feeling that we constitute one community, as well as the most valuable repository of the contributions of our members, and in a lower sense, the *quid pro quo*, which is most looked to as an equivalent for pecuniary contribution. But instead of being abandoned, fresh life was infused into it, and you will all agree with me that its improvement in quality has been more than proportionate to the lessened frequency of its publication. You will also, I believe, concur with me in desiring that yet greater strength may be thrown into this organ, which I will call the lungs of our Association.

Turning to our own Branch, whilst it is satisfactory that death has deprived us of but one member during the past year, it is painful to me to have to record in that individual, one of the oldest surgeons of this town, Mr. Ferris, the personal friend of many of us. Though no longer young, he had actively discharged the duties of a large practice till a short time prior to his death, an event most extensively regretted.

This first visit to Cornwall may perhaps be regarded as the most important circumstance in the Annual Register of our Branch. It is an experimental trip, and I hope its successful results will be apparent next year, when we shall probably meet at Plymouth, and be proved by the large attendance of Cornish members.

It was then proposed by Dr. Carlyon, and seconded by Mr. Kirkness, "That the next Annual Meeting be held at Plymouth."

Proposed by Dr. Pennell, and seconded by Mr. Williams, "That Dr. Butler, of Plymouth, be the President elect."

Proposed by Mr. Spry, and seconded by Dr. Pennell, "That Dr. Kingdon, be re-elected Secretary."

Proposed by Mr. Williams, and seconded by Dr. Carlyon, "That Mr. Barnes, Exeter; Dr. Shapter, Exeter; Mr. Fuge, Plymouth; Dr. Yonge, Plymouth; and Mr. Swaine, Devonport, be the new members of the Council in the room of those who retire, according to the rule,—viz., Dr. Pennell, Mr. James, Dr. Tetley, Mr. De la Garde, and Mr. Gabriel."

Proposed by Dr. Pennell, and seconded by Dr. Kingdon, "That the best thanks of this meeting be given to the Council of the Royal Institution of Cornwall, for their kindness in opening their Museum to the inspection of visitors and allowing the use of their room to the members of this Branch of the Association on the present occasion."

Proposed by Mr. Kirkness, and seconded by Mr. Quick, "That the Secretary be requested to express to the Council of the Association, the satisfaction felt

by the members of this Branch in the result of the changes effected in respect of the Journal, and their hope that yet further efforts, and if necessary, outlay, will be directed towards rendering it a perfect representation of the high character of the Association, and a sufficient repository of periodical medical and surgical intelligence."

Proposed by Dr. Carlyon, and seconded Mr. Spry, "That the thanks of this meeting be given to the retiring President, the Secretary, and other members of the Council for their services during the past year, and that they be requested to accept the grateful acknowledgements of the members present."

COMMUNICATIONS.

A case of simple fracture and dislocation of the greater portion of the right astragalus, forwards and outwards, was then read by Mr. E. J. Spry, Surgeon to the Royal Cornwall Infirmary.

Dr. C. Barham, Physician to the Royal Cornwall Infirmary, read an interesting case of "Periodical Purpura and Vicarious Catamenia."

DI-ARSENITE OF QUININE.

Dr. Kingdon introduced a new preparation of quinine which he had lately succeeded in preparing. It is the Di-arsenite,—that is, it consists of one part of arsenious acid, and two of quinine; it is a powerful medicine, and one which he has found of great benefit, especially in chronic cutaneous affections, and has no doubt it would be equally beneficial in ague, tic douloureux, and neuralgia. It possesses both the qualities of a mineral and vegetable tonic, and when the system has become habituated to either the one or the other, (which we frequently find the case from long-continued use), by the administration of this medicine you still keep up the former action, while at the same time a new one is introduced into the system. He related a case which demonstrates this very satisfactorily. A young woman who had been affected with lepra six years, was admitted a patient at the Exeter Dispensary, under his care, and was ordered the Liq. Potassæ Arsenitis, with Decoct. Dulcamaræ, three times a day. For a time the disease appeared to be improving, but it gradually got back to its former state, although the quantity of arsenical solution was increased to the full extent; he then ordered one-third of a grain of diarsenite of quinine to be taken twice a day, and the following week the eruption was much improved, to make use of her own expression, "It was looking quite beautiful." It has been gradually increased to four times a day, and now she is nearly well.

Dr. Kingdon has tried it in several other cutaneous diseases, and with equal success. The preparation is made in the following manner:—He first dissolves 64 grains of arsenious acid, and 32 grains of pearl ashes, or subcarbonate of potash, in four ounces of distilled water, by boiling it for about half an hour, and then makes it up to four ounces with as much water as may be required, so that each drachm may contain two grains of arsenic. He adds five drachms of this solution to two scruples of disulphate of quinine, previously disolved in boiling distilled water; immediately a white curdy precipitate is formed, which is the di-arsenite of quinine; he then pours it on a filter, well washes it, and leaves it on the filter to dry. When the proportions are accurately weighed the water is neutral, and no arsenic can be detected. It is uncrystallizable and insoluble in water, but soluble in alcohol. He gives the one-third of a grain for a dose twice a day, and gradually increases it to three and four times in the course of the day, either made into pills with bread, or in the form of powders mixed with a little sugar or gum; of course nothing acid must be given at the same time, as that would decompose it.

Mr. Spry detailed a case in which a mass of foreign matters, consisting of hair, wool, rags, and thread, weighing an ounce and six drachms, was expelled from the bowels of a young woman aged 16.

DISORDERED APPETITE.

Mr. Kirkness mentioned the following case of a young woman who had several bald places on her head, which was occasioned by her pulling out the hair and eating it:—A young woman, aged 22, residing in Truro, had been for many years in a very delicate state of health, with irregular menstruation, and many plans for restoring her health failed. She was about two years ago detected eating her hair, which accounts for many bare places on the head, which had been supposed to be porrigo decalvans. Her head was shaved, and the unnatural appetite ceased at once, for she always rejected the hairs of other people. She began at once to improve in her appearance, and the catamenia returned perfectly, and this state continued until her hair grew long enough to pull, when her old practice returned, and her health again suffered. She was allowed to go on for six months. When I first saw her I found her much emaciated, with large bare places on the scalp, and again advised shaving, which was as successful as the former time, and this operation has been necessary twice since. The thoracic and abdominal viscera appear to be quite healthy, and it is remarkable that her health should so soon improve after removing the hair, and again be effected on her hair returning.

Mr. Paul, of Truro, brought before the meeting a sample of fluid magnesia, prepared by Mr. Jenkins, of Truro, containing eighteen grains to an ounce, at the small cost of five shillings a gallon.

Dr. C. Barham read a case of poisoning by oxalic acid, and recovery of the patient.

Mr. Spry brought forward several interesting cases of fibrous tumour of the uterus. Dr. C. Barham also mentioned several cases of the same description.

Mr. Spry mentioned a case of punctiform and tubercular melanosis.

NECROSIS OF THE OS HYOIDES.

Mr. Spry exhibited a specimen of the *os hyoides* entirely deprived of its periosteal covering by ulceration, irregular on its surface, and in a perfect state of necrosis. The bone was complete, with the exception of a small portion of its right corner, which Mr. Spry had no doubt was expectorated at the same time as the other part, but lost in the mass of sputum, as no trace

of it could be felt by a very careful examination of the throat.

The patient from whom it was obtained was a young man, residing at Truro, who, at the age of 21, was attacked with sore-throat and cough; his business as hostler, exposing him to great vicissitudes of temperature, and to irregularities of living. This and subsequent attacks of cynanche were very much neglected by him, never submitting himself to proper treatment for a sufficient time to get rid of the results of one attack before he had another. The result was, that ulceration spread from the tonsils to the fauces and larynx. He lost his voice, and suffered from the most distressing cough, with purulent expectoration. The palate bones became diseased, as well as the inferior spongy bones of the nose. The poor fellow dragged on a miserable existence for about six years from his first illness, and then, during an unusually severe fit of coughing, he expectorated this diseased bone, which was attended with great hæmorrhage, and such exhaustion that it was expected that death would at once have relieved him from his sufferings. He lived several weeks after that event, reduced to a pitiable state of inanition.

Dr. C. Barham detailed a case of permanently slow pulse.

Dr. Carlyon then took the chair, when it was proposed by Dr. Pennell, and seconded by Dr. Kingdon, that the best thanks of the members be given to Dr. C. Barham for the able manner in which he had presided over the meeting.

At five oclock the members sat down to dinner at Pearce's Hotel, and then separated till the next Anniversary Meeting.

NEWTON BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ANNUAL MEETING.

The Annual Meeting of the Newton Branch of the Provincial Medical and Surgical Association, was held at Newton, on July 22nd, 1847. Dr. Scott, of Liverpool, the retiring President, in consequence of the unavoidable absence of W. J. Wilson, Esq., of Manchester, the President of the year, occupied the Chair. The members present were—Robert Thorpe, Esq., Thomas Radford, M.D., Thomas Nursaw, Esq., John Hatton, Esq., James Whitehead, Esq., Manchester; James Kendrick, M.D., John Sharp, Esq., Warrington; John Mather, Esq., Ashtone-le-Willows; Thomas Bott, Esq., Bury; George Sumner, Esq., Lymm; T. Gaskell, Esq., St. Helens; R. W. Scott, M.D., G. C. Watson, M.D., W. H. Duncan, M.D., J. M. Swift, M.D., Ellis Jones, Esq., John Burrows, Esq., Liverpool; J. Armitage Pearson, Esq., Woolton; William E. Manley, Esq., Tyldesley; George Daglish, Esq., Joseph Rogerson, Esq., Wigan.

Dr. Scott having taken the chair, addressed the meeting as follows:—

Gentlemen,—We have now met together on these occasions for many years, and I am sure that you will agree with me, that whatever may have been the value of these meetings in a scientific point of view, they have at least been productive of much social enjoyment, and friendly feeling towards each other. It was certainly the primary intention that we should make these meetings conducive, as much as possible, to scientific purposes, and the communication of mutual information; and we have not, on any occasion, altogether lost sight of these objects, as much valuable matter has been from time to time brought before us. Our time, however, has generally been so limited, that this part of our intention has not been so fully carried out as it would otherwise have been, and has probably led some to question the real utility of these meetings. The more frequently I have attended on these occasions, the more have I felt convinced of the impracticability of rendering them of any material importance on the scientific parts of our profession, from the very limited time at our disposal, and amid so much other routine business to transact; and hence these meetings have gradually assumed the shape of friendly gatherings rather than of strictly scientific re-unions—a change which some may think not altogether for the worse. The fact is, gentlemen, that there is really little necessity for the latter, as the number of medical journals now weekly published, and our own especial one, afford such facilities for mutual communication, as to render personal intercourse unnecessary for purposes of this kind. I cannot omit, in this place, to congratulate the Members of the Association on the very great improvement which has taken place in the Journal, since the period of publication has been changed. It has now assumed a rank scarcely inferior to any other, and the manner in which it is now conducted is as creditable to the editor as its contents are to the Members of the Association; and I am glad to find that those of this Branch have contributed so large and valuable a portion. I cannot but think that the Journal, if it continue to be conducted in an equally satisfactory manner as at present, will constitute the strongest link to cement the Association together.

But, gentlemen, though some of us may consider these Meetings neither necessary nor of much value, as regards abstract science, yet there are other objects of no little importance, to which they conduce. One great object is—the organization of a system which not only embraces in itself many eminent and influential members of the profession in the provinces, but which forms a centre round which all other members may rally, when the more important interests of the whole profession may be at stake. The members of the Local Council of the Newton Branch generally, form as it were the staff of a permanent militia, who, in case of necessity, may call around them all the great mass of volunteers from the neigbouring towns.

I must confess to you that one of the greatest advantages which I have ever hoped to be derived from the Association and its Branches has been the means of general co-operation—by a species of national medical impulse, to be directed by this agency—to the elevation of our position in society, as a moral, educated, and disinterested body of men; sacrificing, as we have done to an extent which

ought not to have been required from us, our individual interests, and perilizing our existence continually—for emoluments scarcely equalling those of common artizans. No other profession submits to this degredation: we know that our labours in the cause of humanity are superior to all, except as regards the immortal interests of man, and for which those who minister unto them, are too often as equally inadequately remunerated as ourselves. Why should all this be? Why should the *two* professions most essential to the temporal and eternal well-being of mankind, be thus (*not surely despised*) but neglected, overlooked, and left to struggle against difficulties and privations, with the sole comfort that they have endeavoured to perform a Christian duty.

This subject is too complicated and extensive for me now to occupy your time with; and I can only add, that unanimity amongst ourselves on some essential point like this—that is, the determination to *resist this inadequate remuneration*, by all divisions and members of the profession throughout the country—to leave the work *undone*, rather than do it in a manner so degrading to us as a profession—would not only tend most materially to advance the profession in the estimation of society, but might eventually pave the way to the remuneration of the medical officers of the dispensaries and hospitals of the kingdom. What (may I ask you) has so degraded our profession in public estimation? What has made our services in private practice so ill requited? Is it not the fact, that some members of the profession, equally qualified, legally, as any of us to practise, have so far condescended, or have unfortunately been so far compelled by necessity, to stoop (I may not say to *degrade* themselves and us) to receive such paltry and inadequate remuneration? Has not this tended to lower the grade of the whole profession? In the commercial spirit of the present day, has it not led people to think that they must buy in the cheapest market? not considering the value of the article, but simply its cost; and do they not often buy the razors which Peter Pindar speaks of, as not having been meant to *shave*, but *sell*? I cannot but feel, that if the subject of inadequate remuneration to our profession were taken up by this Branch of the Association, which I believe to be the most important of all, comprising as it does members from the great towns of Lancashire and Cheshire, it could not fail to have great influence at the meeting of the Association at Derby; and if the subject of inadequate remuneration were energetically taken up by the General Association, it might be attended with most beneficial results. And this general and united co-operation of provincial medical practitioners is, I conceive, one of the greatest benefits of the Association.

I feel that I ought to apologize for detaining you so long, on merely vacating my seat to one who can so much more efficiently and worthily fill it; but having so long attended these meetings, and having had so much pleasure in so doing, and having so often been questioned as to the benefit arising from them, I do not wish to take leave of my official situation, without stating, in some degree, the reasons for which I have adhered to it, and the hope which I entertain, that others may carry forward our objects to a greater, more satisfactory, and valuable extent.

Mr. Hatton then read the Report of the Council, which chiefly referred to the financial statement of the Branch.

The Report having been read, it was unanimously resolved:—

On the motion of Dr. Radford, of Manchester, seconded by Mr. Nursaw, of Manchester:—

I.—"That the Report of the Council now read be adopted, and printed for distribution to the Members, together with the proceedings of this Meeting."

On the motion of Dr. Kendrick, of Warrington, seconded by Mr. Mather, of Ashton-le-Willows:—

II.—"That the cordial thanks of this Meeting be given to the President, Dr. Scott, and to the Vice-Presidents, Mr. Bainbrigge and Mr. Turner, for their services during the past year."

On the motion of Dr. G. C. Watson, of Liverpool, seconded by Mr. Hatton, of Manchester:—

III.—"That Sir Arnold Knight, M.D., of Liverpool, be elected President; Mr. J. A. Ransome, of Manchester, and Mr. Gaskell, of St. Helens, Vice-Presidents for the year ensuing, in accordance with the nomination of the Council."

On the motion of Mr. Ellis Jones, of Liverpool, seconded by Mr. Manley, of Tyldesley:—

IV.—"That the thanks of the Meeting be given to the Council, for their services during the past year, and that they be requested to continue them."

On the motion of Mr. Sharp, of Warrington, seconded by Dr. Kendrick, of Warrington:—

V.—"That the thanks of this Meeting be given to the General Secretaries, Mr. Hatton, of Manchester, and Mr. Barrow, of Liverpool, for their services during the past year."

A letter was then read from Mr. Barrow, tendering his resignation of the office of Honorary Secretary, in consequence of his removal to Clifton, near Bristol, and it was unanimously resolved:—

On the motion of Mr. Hatton, of Manchester, seconded by Dr. Radford, of Manchester;

"That this Association accepts, with regret, Mr. Barrow's resignation, and at the same time beg to tender him their warmest thanks for the great attention and interest he has always evinced in the welfare of this Branch, and beg to nominate Dr. G. C. Watson, of Liverpool, as his successor."

Some new Members were then announced.

Communications.

Contracted cicatricks from a burn.

Mr. Whitehead, of Manchester, introduced the following case of successful division of contracted cicatrices resulting from a severe burn, drawings of which he exhibited—one representing the parts previous to, and the other three years after, the operation.

E. B., aged twenty-four years and a half, a spinster, received a severe burn when eight years of age, in August, 1830. The injury implicated the whole of the right, and a considerable portion of the left side

of the neck, the entire of the right arm, including the shoulder, both back and front, the axilla, and a part of the hand. The corresponding limb was also extensively injured, but not in an equal degree. Twelve months afterwards—in August, 1831—the surfaces were all perfectly healed; the right fore-arm was permanently contracted upon the arm, forming an acute angle at the elbow joint; the left was in the same way contracted, the position being equal to a right angle. The limbs were held in these postures by a broad web of cicatrix, which subtended the angle at the elbow joint, reaching from the distal extremities of the two members in a slightly curved form. The head was bowed forward and towards the right side, in a very inconvenient and unsightly manner.

At the last named date, being nine years of age, she presented herself for operation. The cicatrices were removed, and the limbs extended and kept in their position during the process of healing, which was effected favourably. Twelve months after the operation, the limbs were again contracted as much as before, and the cicatrices gradually became more and more firm and less yielding.

In the summer of 1844, fourteen years after the receipt of the injury, the patient requested to have another operation performed for the relief of the deformity. At this period the bands were exceedingly thick and unyielding; the subtending margin of each being as firm as, and of similar dimensions with, the tendo Achillis. The right limb only was operated upon; this was done in June, 1844. The cicatrix was divided by an incision, commencing as near the elbow joint as was considered safe, and carried outwards to the free edge. On extending the limb slightly after the first incision, numerous other fibres started forwards from the parts beneath, forming an insurmountable impediment to its further extension. These were also divided, as they presented themselves at each succeeding movement, until, the limb being brought to nearly a straight line, no more bands were felt to hinder the free action of the joint. The limb was kept extended during the healing process, which was accomplished about ten weeks after the operation.

The patient has now (three years after the operation) perfect use of the limb, which seems as strong as if it had never been injured. It can be brought to very nearly a straight line. Both the accompanying drawings were made by the same artist—a non-medical man. The success of the operation appears attributable to the perfect division of *all* the fascial fibres reaching from one member of the limb to the other, across the flexure of the joint.

The anterior and posterior folds of the axilla, and the contraction extending from the jaw towards the shoulder and clavicle, were subsequently divided in the same manner, with equally favourable results.

DISLOCATION OF THE ANKLE

Mr. Manley, of Tyldesley, related the following case of simple complete luxation of the metatarsal bones, and exhibited the patient:—

July 10th, 1845. I visited the cotton mill of Messrs. J. Clegg and Co., situated at Tyldesley, to see Robert Lee, aged 20 years, a stout and rather robust man, a collier, who, in descending the jack-well, connected with the steam-engine, in consequence of the breaking of the rope, at about two yards from the top, was precipitated to the bottom, a depth of sixteen yards. The diameter of the well is small, and on one side are placed the pump trees, &c.; he was employed to sink the well still deeper, and the time he was down previous to the accident, had left the surface of the rock in a rough hewn state. On my arrival at the mill, I found him lying in a state of collapse or syncope; there was slight distortion of the foot, it had the appearance of being shorter, and thrust across its dorsum, at the part where the tarsal and metatarsal bones join. The latter were thrown up, and resting upon the tarsal bones, from one side of the foot to the other, so completely that I could pass my finger over the whole length of their articulating surfaces. Whilst the man was in this state of syncope, I attempted to reduce the luxated bones into their normal situation; first, by laying hold of the whole of the toes, and making extension, whilst an assistant held the foot by the heel and ankle. I repeated the extension in this manner, and had the limb placed in different postures, so as to prevent any muscular resistance; after several attempts I found these efforts useless. I next laid hold of the metatarsal bones of the great toe, and made moderate extension, at the same time, with a little lateral and rotating motion; immediately the bone began to move, and was very readily replaced. I adopted the same plan with each of the metatarsal bones in succession, and reduced them with great facility. A piece of moderately strong plaister skin, in the form of a many-tailed bandage, spread with Empl. Plumbi, was applied round the foot; and underneath, to fill up and support the arch, was applied a graduated pad or splint of strong grey calico, and over the whole a light bandage. In two days two or three vesications appeared over the toes, occasioned by the pressure of my fingers whilst making the extension; besides these he had a little pain after the accident. In one month he could move a little with a stick. In six weeks he walked very well.

He informed me, that when about sixteen years of age, a similar accident happened to him; he then fell down a coal shaft, and injured the same foot, and for several weeks was under the care of a bone setter in Bolton; that ever since, there always had been a rising or lump upon the upper part of the foot. The suspicion in this case is, that he had a *partial* luxation, and probably, when he met with the last accident, such having occurred, complete dislocation was the more readily produced.

It is now two years since he sustained the last injury, and up to the present period has been constantly engaged at laborious work, as a miner or quarryman. He does not experience any uneasiness besides a feeling of weakness. The present appearance of the foot shows a fulness on its dorsum, the two centre metatarsal bones appearing a little higher than the rest;—probably the foot in its present state is what he described it to be after the first injury.

In a short discussion upon the question of the

treatment of labours by ætherization, Dr. Radford, of Manchester, alluded to some accidents which had presented themselves within the scope of his knowledge, that would tend to diminish, very much, the credit which had been gained by this remedy in midwifery. Dr. Radford considered that there must be many conditions of the parturient which would forbid the use of æther, and he did regard its employment with some degree of apprehension.

Mr. Manley reported, in reference to obstetric topics, that he had a patient whose last confinements presented the number of seven children, in the following manner:—The first labour consisted of twins, the sexes not remembered; the second, two years afterwards, of triplets,—viz., two girls and one boy; sixteen months subsequently, she had twins again, both males. The father's age, forty; mother's, thirty five. All natural labours.

NOTES FROM A PRACTITIONER'S DAY BOOK

AUTUMNAL CHOLERA.

About nine o'clock one evening in the beginning of August, 1846, I was summoned to a man who had been attacked with the vomiting and purging, which were then very prevalent. The seizure had commenced on the previous night, my patient having during the whole day felt some headache, and a bitter taste in the mouth. The sickness was the first symptom, and was soon followed by the diarrhœa, both continuing almost incessant until the time of my visit. The matters vomited I did not see, but I presumed them to be bilious, as they were stated to have a very bitter taste. The dejections consisted of a semi-transparent fluid, with pinkish and reddish tinge, resembling water mixed with a small portion of blood, or that in which raw flesh had been infused. The passage of these motions caused a smarting and burning sensation at the anus.

When I first saw my patient he was in a state of collapse, with a feeble pulse, and cold surface and extremities. He complained of great pain in the belly, and frequent cramps of the muscles elsewhere. The retching and purging recurred every few minutes, the motions being passed in bed, though he was quite conscious of the act. I ordered that ten grains of the Hydrargyri Chloridum should be administered immediately, and no drink taken for half an hour afterwards. This had the effect of checking the sickness, which did not again occur. My patient's feet were placed in warm water, into which a handful of the flour of mustard was thrown, and hot fomentations were applied to the belly. I now left him, having prescribed fifteen minims of the Acidum Nitricum Dilutum, with ten of the Tinctura Opii, to be taken in a draught every four hours, until sleep and a cessation of the diarrhœa occurred. Toast and water and barley water were directed to be given freely during the night.

At twelve, (three hours afterwards,) I was again summoned to my patient, whom I found suffering severely from cramp in the extremities, but in many other respects he was much better. The surface was now warm, and the pulse fuller, for re-action had been brought on by the hot applications. There was no pain in the belly, but merely a sensation of soreness. The sickness had ceased, but the purging continued incessant, and the motions were still passed in bed. From some mistake the medicine had not yet been commenced, so I gave him a dose of it, with five grains of the Pulvis Ipecacuanhæ Compositus, which I happened to have in my pocket. The spasms were constantly shifting from one muscle, and from one extremity, to another; and I soon observed that they were generally excited by his own movements. I told him to lie perfectly still; and, when he informed me where the spasm existed, I put the limb in such a position as to stretch the muscle. This gave him almost instant relief; but when I moved the limb, the patient would, to assist me, use some muscle, which was immediately spasmodically contracted. Thus, in one instance, the following course was taken: When the gastrocnemei were cramped, I extended the leg, and bent the foot upwards; but, whilst doing so, the patient used the quadriceps extensor cruris, and this muscle immediateiy became the seat of spasm. This was relieved by rotating the thigh outwards; but a movement of the hand had been made to point to the seat of pain, and the flexor muscle of the fingers became cramped. After a little practice, however, he was able to remain quite quiet, in spite of his pains and the movements I made, and the spasms soon became confined to the muscles in the sole of the foot, and the extensor brevis digitorum pedis, to each of which it shifted, when I placed its opponent on the stretch. This gradually diminished; and, within an hour after I had entered the room, my patient was asleep, and I retired. The next morning the diarrhœa had greatly abated, and he only had an occasional cramp, which ceased after a repetition of the warm bath. He was ordered to take broth freely, and the dilute nitric acid without the opium prescribed. He had no motion until the following morning. The medicines were discontinued, my patient was convalescent, and I ceased to attend.

Some English practitioners appear to have very indistinct ideas of the character of the rice-water evacuations of Asiatic cholera. In conversation with a gentleman on the autumnal diarrhœa of 1846, he remarked that in many of the cases which had come under his notice, the true rice-water evacuations had occurred. On my observing that even in the most severe cases, I had always found the dejections were characteristic of bilious diarrhœa, a transparent pinkish fluid, resembling water in which raw flesh had been infused, he exclaimed, "That's just what I mean. That's just what I saw." Now, rice-water has a very different appearance. It is a slightly viscid, opaline fluid, with rather a white than a pinkish tinge. I suspect that a great many of the writers who have placed on record cases of autumnal diarrhœa, in which the rice-water evacuations are said to have occurred, labour under a similar misapprehension of the characters of this fluid.

There are symptoms which usually for several days

precede an attack of bilious diarrhœa. After a succession of very hot weather, and when the skin has been exposed to a long continuance of undue excitement, the patient begins to feel a lassitude, with loss of appetite and headache. He sleeps heavily at night, but wakes early and more freshed in the morning. He dreams a good deal, and his dreams generally have a frightful character. His tongue is furred, and he has a nauseous bitter taste in the mouth; whilst his bowels are rather confined than otherwise. His appearance is that of a man out of sorts; there is a dingy yellow tinge in his complexion, and his haggard looks indicate a want of tonicity in the muscles of the the face. All this is perhaps heightened by his dishabille; probably he is not shaved, for he feels a disinclination to take his usual pains to dress with neatness.

Now, if we could take this patient and dissect him on the spot, we should find his gall-bladder distended with bile, of a semi-solid character, for the aqueous portion has been re-absorbed, and has gone to supply the demand upon the skin in the shape of perspiration. In the hepatic ducts the bile has less consistence, for it has been subjected to the action of the absorbents for a shorter period of time. The bile-secreting cells are distended with yellow fluid and oil globules. The biliary elements accumulate in the blood, and their circulation gives the skin its yellow tinge.

Now, undoubtedly the proper treatment for all this derangement is a brisk cholagogue purgative. But you must be careful. It is the last straw which breaks the camels back; it is the last drop which bursts the swollen lake. The additional bile formed in consequence of your purgative adds to the accumulation, and the pent-up secretions at length break forth into the intestines, causing all the irritation which characterizes Asiatic cholera, and which may, with old and feeble people, have a fatal termination. Your prescription, unless you have given a very careful prognosis, will have the discredit of all this mischief; and there are circumstances where such an event would be your ruin. Imagine, for instance, a young practitioner who has just settled upon the estate of some wealthy Peer. The noble Lord, after a life of indolence and luxury in Town, has retired to his Devonshire seat, and spends several days riding about visiting his farms, exposed to the heat of an autumnal sun, and taking more exercise than usual. Feeling himself not quite the thing, he thinks a little medicine would do him good; and, as the ailments are trifling, sends for the country surgeon. Well, the case is clear enough; a calomel pill and senna draught are sent. The Court Physician has prescribed the same a hundred times when his Lordship's bowels wanted to be drenched out after a long course of over-eating. Bilious cholera follows, the patient sinks into a state of collapse. A messenger is despatched for the Court Physician, but long before he arrives his Lordship has been gathered to his ancestors. I pity you Mr. Johnson, surgeon, &c., you had better change your name, and retire to Durham or Yorkshire, for Dr. Parker Pepp, without one hundredth part of your knowledge, has said that as there was no harm in a calomel pill and black draught, there must have been some mistake in the medicine you sent. This may be an extreme case, but something like it very frequently occurs. Patients, after the mildest aperient, when the liver has been in this condition, have said to me, "Oh! doctor, your medicine was too strong, and it has almost killed me. I have been going upwards and downwards ever since I took it."

Now, the exercise of a little judgment will save a great deal of discredit. When your patient is young and hearty, you may prescribe a brisk purgative without doing yourself or him any harm. I never do so, however, without cautioning him as to the probable result, and giving directions as to the steps to be taken when it occurs. With old and feeble people, it will be better to restore the excretion of bile by more gentle means. Make them avoid exposure to heat. Prescribe five grains of Plumer's pill every night at bed time, and twenty or twenty-five drops of dilute nitric acid three times a day. In this manner you may restore your patient to his usual state of health without any severe means, and even prevent that violent action which nature would probably have established with a curative intention.

The bitter taste in the mouth is a symptom which is very characteristic of an accumulation of the biliary elements in the blood. The yellow tinge, the haggard look, the headache and the listlessness, are all produced by the existence of an undue quantity of bile in the circulating fluid. It escapes in the secretions of the other glands; it appears in the urine. The bitter taste is an evidence of its separation by the mucous follicles of the mouth and tongue, and perhaps also by the salivary glands.

C. ALNECAPLE.

PRACTICE OF MEDICINE BY UNQUALIFIED PERSONS.

NOTICE FROM THE SOCIETY OF APOTHECARIES.

The Society of Apothecaries in the month of December last communicated to the profession and the public the opinion of the Law Officers of the Crown, that an indictment would lie against a person who had practised as an Apothecary without legal qualification; and that such indictment might be preferred at the instance of a private prosecutor. The Society at the same time intimated, that they would be ready to enforce the law to the extent of the means placed at their disposal, but that those means were inadequate to the institution of frequent prosecutions.

Since the period in question the Society have instituted prosecutions against several individuals, and the opinion of the Attorney and Solicitor-General has been confirmed by the decision of the Criminal Courts. The law upon this subject may therefore be considered as established; and it cannot be too extensively known, that persons who engage in the practice of an Apothecary without having given such evidence of their competency as the law has demanded, are liable to be criminally indicted at the instance of any individual prosecutor who may think proper to put the law in force.

It is essential also that the inability of the Society of

Apothecaries to institute prosecutions in every case of illegal practice in which their interference is called for should be distinctly made known, in order that other parties may not be deterred from putting the law in force, under the impression that the Society of Apothecaries are able to take that duty upon themselves.

But although the Society connot institute legal proceedings themselves in every case to which their attention is drawn, they are able and will be found ready and willing to afford to all parties who may be desirous of preferring an indictment against a person practising illegally, such advice as the Society's experience in the administration of the Apothecaries' Act may enable them to give; and their Law Officer has received instructions, upon application from such parties, to render every assistance and information in his power as to the mode of proceeding against illegal practitioners, and as to the nature of the evidence by which a prosecution must be supported.

The Society of Apothecaries, therefore, under a conviction that increased security to the public health will result from an efficient execution of the law which forbids the practice of medicine by those who have not given evidence of their possessing adequate skill, beg to urge upon the public authorities, upon medical associations, and upon individuals, the importance of putting the law in force against offenders in such fitting cases as may come under their immediate notice.

The Society themselves have, in the mean while, instituted several additional prosecutions against illegal practitioners, which are now in progress.

Apothecaries Hall, 6th July, 1847.

General Retrospect.

PHYSIOLOGICAL CHEMISTRY.

ON THE CHANGES IN COMPOSITION IN THE CONTENTS OF HEN'S EGGS BEFORE AND AFTER INCUBATION.

Some experiments have been lately performed by M. Capezzuoli on hen's eggs and young chickens, for the purpose of ascertaining the kind and quantity of the materials consumed during the early periods of life, both before and after incubation; and of determining the changes which those materials undergo in the system. The results of these experiments he has expressed in a tabular form. The first table contains the analysis of twelve eggs, and shows that the mean quantity of fatty matter contained in each egg amounts to 120 grains, that of albuminous matter to 160 grains, and that of water to 780 grains. The fatty matter was extracted by means of æther and boiling alcohol; all the residue was regarded as albuminous matter, while the quantity of water was ascertained by abstracting from the weight of the whole egg, the united weights of the shell and of the fatty and albuminous matters. The second table shows the results of similar analyses performed on fourteen chickens, some of which were examined previous to incubation, others after they had left the shell and had partaken of various articles of food. The same table also gives the degree of heat of several of the chickens at the moment of death, the quantity and quality of the excrements evacuated during life, and the period of the first appearance of uric acid in the allantois during incubation. On comparing the quantity of fat and of albuminous matter in any of the chickens (as given in this table,) with the average quantity of these substances in the egg, it at once appears how much fat and albumen has been lost or consumed by the chicken.

From his several observations, the author draws the following conclusions:—

1. During incubation, and during the life of the chick after its escape from the shell, the diminution undergone in the quantity of fatty matter is less than that undergone by the albuminous matter: and this is so, whatever be the food partaken of by the chick after its escape from the shell.

2. The diminution itself is very slight during incubation, however late the period is to which this process is prolonged; the loss in weight therefore which the contents of the egg suffer during incubation is for the most part at the expense merely of the water.

3. The diminution of both the fatty and albuminous matters is very great when the chicken has lived for some time without food after its escape from the shell; so great, that in some instances when the chickens had been deprived of all food for about a day and a half, the quantity of fatty matter contained in their body had diminished to less than one-half of its original amount. The albuminous matter did not diminish in such a degree, though its decrease was very considerable, amounting to about one-third its original quantity.

4. In chickens fed with flour and sugar the diminution was also very great; greater even, as regards the fat, than in the former case. Notwithstanding this however, it cannot be supposed that this kind of food contributed nothing to the maintenance of life; for the chickens in question lived longer, and were more lively and active, than those to whom no food at all was given. It is probable, therefore, that in this non-nitrogenous food they found some compensation for the large consumption of material effected during respiration.

5. Lastly, even in those chickens which were fed in the ordinary way, a remarkable diminution in the quantity of fatty and albuminous matters was observed; so that it must be inferred, that chickens in the earliest periods of life always consume more material than they obtain by means of their food.

It may be concluded from the above, that even albuminous substances are employed in the respiratory process; and in those cases even, in which those articles of food that in the strictest sense may be regarded as respiratory, are provided in full quantity.—*Heller's Archiv.*

PATHOLOGY.

ON THE URINE IN BRIGHT'S DISEASE.

By Gluge.

Rayer has collected the results of his own and Desir's researches on the diagnostic value of albuminous urine under the following propositions:—

1. When the urine is albuminous certain changes are discovered in the genito-urinary apparatus, and in the blood.

2. In dropsy with albuminous urine, the solid matters of that fluid are diminished in quantity and are found to exist in the blood and serous effusions.

3. In albuminuria, not only does the urine contain albumen, but its specific gravity is below par, and it is deficient in salts. It sometimes also contains mucus and blood corpuscles.

4. The urine may be albuminous for several days together in several acute diseases. When this is the case, it indicates congestion of the kidneys or bladder. [When urine is albuminous under these circumstances, its specific gravity is not diminished, but on the contrary is sometimes increased.]

5. During health, the urine may exhibit an albuminous re-action, in consequence of irritation of the urinary passages. The same thing occurs when semen is passed with urine in any considerable quantity. In females the admixture of the menstrual secretion with the urine may cause it to contain albumen.

6. In hæmaturia, the urine may contain albumen either in conjunction with the colouring matter of the blood alone, or with the fibrinous portion also.

7. When the urine is slightly albuminous, and at the same time contains mucus, and pain along the course of the ureter exists at the same time, it is probable that the pelvis of the kidney or the ureter is inflamed but not the substance of the kidney.

8. Urine which exhibits a distinct deposit, or flocculi, of spontaneous coagulated albumen, is indicative of chronic inflammation of the ureters and renal calyces.

9. Prostatic abscess opening into the urinary passages, renders the urine albuminous as in chronic pyelitis; in this case the appearance of pus-globules under the miscroscope explains the phenomenon.

10. Albuminous and purulent urine becomes ropy and mucoid when the urine is alkaline.

11. Urine containing seminal fluid may exhibit an appearance of albumen: the microscope reveals the true nature of the case.

12. Albuminous urine containing fibrinous flocculi is a common symptom of "calculous pyelitis," cancer, and fungus hæmatodes of the kidney, as well as of idiopathic hæmaturia. In such cases fibrinous casts of the ureter or other renal passages are frequently passed and have been mistaken for worms.

13. If urine which does not exhibit any spontaneous deposits coagulates by heat and nitric acid, and at the same time is deficient in the urea and in the uric and phosphatic salts, especially if dropsy be confirmed, we may predict the existence of Bright's disease.

14. If urine after having been copious and glucosyric coagulates by heat and nitric acid, it is (according to Thenard,) indicative of amendment. I have frequently confirmed this observation.

15. On the other hand, I have known a diabetic patient become dropsical without a co-existing albuminous state of the urine.

Becquerel regards morbus Brightii as hypertrophy of the Malpighian bodies, and not as a form of nephritis. According to him the urine in Bright's disease exhibits the character of anæmic urine,—namely, a deficiency in its chemical elements. In twenty-two cases the specific gravity fluctuated between 1006.3 and 1014.7. The uric acid and its compounds were greatly diminished in proportion to the other saline constituents. The urine was in general acid, but without sediment. If any complication should exist, as an intercurrent fever or inflammation, disease of the heart or liver, then the urea will re-appear. In other cases the urine may become alkaline, and deposit the phosphates. Finally, in some cases of the disease the urine retains its normal characteristics.—*Atlas für Path. Anat., Lief* 10, p. 17.

FORMATION OF TUBERCLE.

[The opinions of pathologists are even to the present time divided as to the proximate cause of the deposition of tubercle, some maintaining that inflammation is the active agent, others denying that the product ever originates in that process. Dr. Wilshire appears to entertain opinions which may be made to amalgamate with both, maintaining that tubercle may be deposited in three modes,—by an error of nutrition, by inflammation, and as a consequence of morbid exhalation. The conclusions on this subject, which may be found at the close of one of his excellent lectures, are as follows]:—

1. The simple act of nutrition,—at least an abnormal kind of one,—may be sufficient for the deposition of tubercle.

2. If the blood be morbid, and the constitutional tendency strong, organic assimilation in any of the more important organs can scarcely be attempted without being accompanied by tuberculous formation.

3. In a great many cases, not only is it unnecessary that inflammation should happen, but it is not even essential that any local congestion should ensue, in order that tubercle be deposited.

4. But in other cases it may be affirmed that although the blood be bad, and the scrofulous diathesis exists, the simple act of nutrition is not alone sufficient to give rise to a non-fibrinous granular albumen, in the form of tubercle. But here local inflammation being added, the exudations are not in character with those of other inflammations and tubercle is formed.—*Medical Times*, May 8.

TUBERCULAR TUMOUR OF THE VERTEBRÆ OPENING INTO THE ŒSOPHAGUS.

A female, aged 20, entered the hospital of Bassano for an obscure affection, accompanied by extreme marasmus, which had supervened upon her last confinement. She had very great difficulty of swallowing, repeated vomiting, difficulty of breathing, and great general debility. She died completely exhausted by hectic fever. On examination after death both pleuræ were found adherent, and behind them, directly over the vertebral column, a tumour was discovered, about the size of a walnut, and springing from the fifth dorsal vertebræ. A second tumour, of larger size, was also seen to include the bodies of the fourth, fifth, and sixth vertebræ, the osseous structure of which was converted into a soft caseous matter. On opening the œsophagus

that canal was found to be narrowed, and firmly adherent to the most prominent part of the last-mentioned tumour, a portion of the contents of which had escaped through an irregular ulceration of bad aspect.—*Giornale dei Progressi*, Jan., 1846.

MORBID ANATOMY OF CHRONIC AND ACUTE RHEUMATISM.

In a case of muscular rheumatism, Hasse found the muscles, and cellular tissue subjacent, dotted over with ecchymoses, and delicate vascular ramifications, the latter tissue being likewise more or less infiltrated with yellowish transparent fluid. He gives the following account of the morbid anatomy of the joints in chronic rheumatism:—On closely examining the cartilages of the affected joints they were found of a reddish hue; the articular surfaces of the bones presented scattered red points of different sizes. The foramina of the bony substance were also filled with a dirty red pulp, consisting of aggregated cells of a globular form, which treated with acetic acid displayed a large nucleus. There were also numerous blood corpuscles. The fat-cells were few in number and of a particular shape. The whole cell-wall was separated from the usually homogeneous contents, and the interval thus formed was more or less filled with oily granules. Occasionally a little spot of yellow was seen among the dirty red colour, which indicated the presence of normal fat-cells. The reddened portions were dotted with tubercular spots which were sharply circumscribed. The cartilage was in many places irregularly thinned, especially at the margin of the joint. On examining the bones of non-rheumatic persons, Hasse could not distinguish any of the above-mentioned changes.

The author concludes by the following remarks:—It is certain that in rheumatism the cellular tissue, as well as the bony substance, may become the seat of inflammatory exudation. It is even probable, that in the great majority of cases, especially the slighter ones, the morbid anatomy consists of the appearances described. The changes in the bony tissue may be easily recognized after many years have passed. Those in the cellular tissue are determined with more difficulty.—*Monthly Journal, from Zeitschr. für Ration. Med. Band 5.*

PRACTICAL MEDICINE.

ABSCESS OF THE LIVER TREATED BY PUNCTURE.

The following cases reported in the *Medical Times* by Dr. Clay, is sufficiently rare in this country to deserve further publicity:—

The patient complained of fixed pain in the right superior portion of the umbilical region, for which he was treated antiphlogistically without relief. His bowels were constipated; countenance yellow; spirits depressed; anorexia; pulse 90; evident enlargement of the liver, with paucity of bile. He took ox gall, dr. ij.; calomel, gr. x., divided into twenty-two pills, of which, one three times a day was the dose. Under this plan he quickly improved, and remained well until after bathing, when the fixed pain returned. Being at this time in a different locality, he was again treated by bleeding, &c., and as before without benefit. He then took the ox gall and calomel, and a second time became greatly relieved. Dr. Clay lost sight of him from this time, but it appears that while in Dublin he suffered a severe relapse, with pain in the old spot, which had become more tense and permanent. At this spot Dr. Clay passed a grooved needle, and as it gave issue to a drop of pus, he tapped it freely with a trocar, and drew off four pounds of fœtid pus. At each dressing for several days a pound of pus escaped, but after that time the discharge gradually diminished, and at the end of three months the man was completely recovered. Dr. Clay calculated that in all, at least sixteen pints of matter must have been discharged. The treatment after the evacuation of the abscess was tonic and alterative, the functions of the liver being restored by the ox gall and calomel.

SULPHATE OF QUININE IN ANEURISM OF THE AORTA AND IN OTHER INTERNAL ANEURISMS.

It appears that sulphate of quinine has been employed with much success in some Italian hospitals for the relief of aneurism of the aorta and other internal aneurisms. It belongs, in this use of it, to what are termed hyposthenics (subduing action,) and is to be carried as far as the system will bear it. It has, say its Italian supporters, the immense advantage of bringing down the pulse without disturbing its rhythm, of making the buffy coat of the blood disappear, that is, of dissipating the organic condition,—namely, arteritis, on which it depends, and thus of retarding the progress of the aneurismal tumour. The other hyposthenics adapted to the same end according to the same authorities, as by alternation with the sulphate of quinine, are the vegetable and mineral acids, the sulphate of iron, the ergot of rye, the cold ferruginous waters, the arsenious acid, the acetate of lead, and the iodide of potassium.—*Monthly Journal*, July, 1847.

HOMŒOPATHY.

The following case of administering powerful drugs in large doses under the guise of homœopathy, is noticed in the *Medical Gazette* as having recently occurred in London:—

"A lady who had been attended by a highly respectable general practitioner, recently consulted a homœopathic physician, who has acquired some celebrity in the fashionable quarter of the metropolis, for his skill in treating and *curing* diseases by infinite small doses. She received from him four small white powders, with explicit directions, (now lying before us,) one to be taken every other night,—each powder being numbered and the night on which it was to be taken, as well as the mode of taking it, being particularly specified,—"all dry on the tongue." No. 1 was swallowed according to order, and the patient was soon afterwards seized with great sleepiness, stupor, and other alarming symptoms indicative of the action of a powerful narcotic. These effects were followed by diarrhœa. The patient was alarmed, and instead of looking upon the result as an indication of the beneficial working of homœopathic powders, or as a means of curing her

of any latent sceptiscism respecting the efficacy of infinite small doses, she was prudent enough to return to her old medical friend, to whom she handed the remaining powders, with the directions. This gentleman, suspecting that they contained some active narcotic, caused them to be submitted to a chemical analysis. We have now the report of this analysis before us, and of it we shall make the following abridgment. The powders were numbered 2, 3, and 4. They were *similar in appearance*, except that No. 3 was somewhat whiter than the other two: there was nothing to indicate that they were of different composition; and as they were to be taken in the same way on alternate nights, this could not possibly be suspected.

"Althongh there was no great disimilarity in bulk, the powders were very unequal in weight. No. 2 weighed 3.4 grains; No. 3, 1.5 grains; No. 4, 2 grains. No. 2 was found, upon analysis, to consist entirely of calomel and *morphia*, the morphia forming not less than *one grain*. No. 3 contained no morphia or calomel, nor any mineral or other substance, but merely *sugar of milk*. No. 4 was composed of calomel and morphia, the morphia amounting to one half grain."

MEDICAL REMUNERATION AND POOR-LAW AUTHORITIES.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Medical men delight to revile Poor-Law Commissioners and Boards of Guardians, for the low pecuniary value which they attach to medical services to the sick poor. But is this right? Who are the persons that have established, recognized, and would perpetuate the principle, that in the exceptional instance of physicians and surgeons, the poor, on philanthropic grounds, are entitled to our *gratuitous* services? Nay, further, that when subscribers to public charities will *permit* us to act professionally for the poor, they are entitled to our gratitude? See the addresses of successful candidates in medical elections. It is true that, esoterically,—amongst ourselves—we know the "philanthrophy" and the "gratitude" to be very much of a *sham*, but we do not tell the public so. It is perfectly natural, therefore, for Guardians and Commissioners to repudiate fair and adequate remuneration to their medical employés. How can we expect that that which we hold as a marketable commodity, and value at *minus*, should be estimated by the purchasers at *plus?*

It is ourselves, I maintain, and not public bodies, that we have to blame for a state of matters so often imputed to the Poor-Law Commissioners. These latter, I conceive, are in many respects entitled to medical gratitude rather than reproach, for their systematic discouragement of gratuitous service. This is a question which it is high time to have well understood.

I am your obedient Servant,

SCRUTATOR.

Manchester, August 13, 1847.

Medical Intelligence.

APPOINTMENT.

Holmes Coote, Esq., Surgeon to the North London Ophthalmic Hospital, has been appointed Assistant-Surgeon to Bridewell Hospital, in the room of Mr. J. F. Crookes, resigned.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, August 6, 1847:—A. Jubb; J. Ralph; W. Thompson; W. D. Wilkes; R. E. West; J. Ingman; J. Willan; J. C. Nicholls; J. Mc. C. Blizard; D. De L. Ryan; J. T. Knipe.

Gentlemen admitted Monday, August 9, 1847:—H. J. W. Welsh; W. A. Duncan; C. G. Brown; C. Thompson; G. Hother; R. C. Scott; D. W. Williams; T. P. Heslop; S. J. A. Salter; W. H. Edwards.

Gentlemen admitted Members on Friday, August 13, 1847:—A. Godfray; J. Rose; R. Muriel; G. T. Yelloly; A. Williams.

The following gentlemen were admitted Fellows of the College on Thursday, August 12th:—Robert Woollaston, Conduit Street, West, Hyde Park; William Henry Smith, Fonthill Place, Clapham Road; James Williams, Dalston Terrace, Dalston; Bernard Wight Holt, Abingdon Street, Westminster, Assistant-surgeon to the Westminster Hospital; Alfred Poland, Cloak Lane, City; William Fisher, Kendal; and Athol Archibald Wood Johnson, Suffolk Place, Pall Mall, East.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, August 5th:—George Winter Rhodes, Huddersfield; Jabez Harwood, Sheffield; Edward Nason, Nuneaton; John Edward Ellerton, Aberford; John Waddington Hubbard, Leicester; Walter Dowley Eddowes, Loughborough; William Daniell Michell, Truro; Henry Axford Mantell, Farringdon.

OBITUARY.

Died, July 25th, at Handsworth, Francis Burdett Moffatt, M.D.

July 26th, aged 44, William Penn Foster, Esq., Surgeon, Stoke Newington.

July 28th, aged 73, John Reeve, Esq., Surgeon, of Kinver.

Aug. 2nd, of fever, Richard Stephens, M.D.

Aug. 2nd, at Clones, of fever, James T. Hurst, M.D.

Aug. 9th, at Bath, aged 82, Joseph Kearsley, M.D., formerly Deputy-Inspector of the Ordnance Medical Department.

BOOK RECEIVED.

Quarterly Return of the Health and Mortalily in 117 Districts of England, for the Quarter ending June 30th, 1847.

TO CORRESPONDENTS.

Communications have been received from Mr. L. Buckell; Scrutator; Mr. G. Hetling.

PROVINCIAL

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ON ULCERATION OF THE CERVIX AND OS UTERI, AND ITS OCCASIONAL CAUSE OF DYSMENORRHŒA.

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(Read before the Annual Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, held at Bristol, July 22, 1847.)

The subject, Mr. President, which I intend to bring under the notice of the Association, is that of simple or inflammatory ulceration of the cervix and os uteri, confessedly the most common of all the diseases of the uterus, and for that reason the more important that its nature and most successful method of treatment should be studied and appreciated. In connection, I would wish to draw particular attention to the occasional occurrence of dysmenorrhœa as an effect of the disease. The drawbacks for investigating the condition of the internal female organs of generation, in this country, are numerous, and those who have made this branch of our profession a subject of special study, will agree with me when I assert, that a delicacy of feeling in the patient, which I, at the same time, cannot too highly commend, has been hitherto, too frequently fostered on the part of the medical practitioner, by his not duly estimating its importance, and thus caused an additional impediment to the necessary examination with the speculum, necessary alike, I believe, to the welfare of the patient and the reputation of the practitioner; and if, Sir, the welfare of the former be connected with such an investigation, may not the physician's delicacy be construed into an almost criminal neglect, if he thus allows evils to continue for years disappointing hopes of relief, and leaving for a last resort, that which is from the beginning the only rational and efficient mode of treatment. I am quite aware that slight sores and abrasions, from various causes, very frequently recover without any or very little treatment whatever, yet the cases that are so frequently met with of severe ulceration continuing for years, without even a proposal for the employment of the speculum, and a consequent neglect of remedies applied to the diseased part, and subsequently the rapid cure which I have seen effected by means of that instrument, and topical applications, warrant, I conceive, the above remarks.

Having during several years availed myself of many opportunities of examining diseased conditions of the cervix and os uteri, and having preserved accurate notes of many of the most important cases that have fallen under my notice, I prefer exemplifying by two or three of them some of the causes, and the symptoms and treatment of simple or inflammatory ulceration of the os and cervix uteri, thus showing how readily these evils are under the control of medical art when attacked by judicious topical applications. The first case which I shall now relate, I have taken care to be more minute in, as it well illustrates the symptoms, general and local, which the mischief sooner or later, is sure to produce; the others I shall give less in detail, as this will be sufficient for the object I have partially in view—viz., to confirm the statements as to the ready curability of these evils by such means, as referred to by Lisfranc, Jobert, De Loury and Peraire, and since made more particularly, perhaps, known to you, by Dr. Henry Bennet.

I.—The case just referred to is that of a lady, 24 years of age, usually of robust health. A few days after marriage she was attacked with severe inflammation of the vagina and vulva, whilst in London, and there treated very judiciously by a surgeon. A slight leucorrhœal discharge, however, continued on her leaving the Metropolis, and existed more or less for thirteen months, at which time she first came under my notice. During a portion of this interval she had been attended by a friend in Brighton, from whom she received some little relief. On her applying to me she complained of a constant pain in the loins, a sense of heat and dragging in the pelvis, and sexual intercourse during this period had been at times extremely painful; the leucorrhœal discharge was abundant, of a dirty yellow colour, and occasionally sanguineous; her health had suffered much, and she had become nervous and dyspeptic; her tongue was pale, and furred in the centre; pulse quick and irritable. Menstruation had always been natural, but since her marriage *she had always suffered much pain.* The usual treatment having been had recourse to previously, and an examination only by the finger having been proposed and adopted, I recommended the employment of the speculum, which

was immediately acquiesced in. The annoyance of the disease to both husband and patient prevented, I may remark, a false delicacy from stepping in the way to a chance of relief. On the introduction of the finger the vagina was found relaxed, the upper part irritable, and hotter than usual; the os uteri was high, and directed backward; the cervix was large, and of an œdematous feeling, the anterior lip being most so; on the finger being carried over it, an inequality was observed, a part appearing rough, which was more sensitive than the remaining portion. This was more apparent towards the os uteri.

The speculum revealed an inflamed appearance of the cervix, as evidenced by its red and shining hue. The anterior lip which first came under view was seen ulcerated to about the size of a shilling, being depressed a little below the surface, and covered with dark red granulations, which bled on the slightest touch of the speculum. The os uteri to one half its circumference was surrounded by the ulceration, and from the orifice flowed a small quantity of milky-coloured mucus, a proof, as it is asserted, and I believe correctly, that the neck of the uterus partakes of the mischief.

The mucus having been wiped away from the part, I applied the nitrate of silver thoroughly, and introduced it a line or two into the os uteri. Little or no pain was occasioned. An injection of decoction of poppy, to be used twice a day, and a mixture of infusion of gentian, with solution of potash and tincture of henbane, were ordered. Six days after, improvement had taken place, the secretion was less, and the ulcer certainly contracting; the eschar had come away on the fourth day. The decoction of poppy was changed for an injection of the diluted compound alum solution of the London Pharmacopœia; the mixture to be continued, and a pill, containing a grain and a half of mercurial pill and extract of henbane requested to be taken every alternate night. Rest in the horizontal posture, and freedom from all sexual excitement, were enjoined. From this period I used the nitrate generally, with two exceptions, twice a week, for seven weeks, when the ulceration had entirely disappeared, as also the leucorrhœa; the softness of the cervix had returned fully, and its size was considerably diminished; the dyspeptic symptoms had all abated, and she had progressed equally in strength. This patient left Bath in February last. Two months after she became pregnant, and she still remains free from the old complaint.

II.—The second case is that of a patient I attended at the Eastern Dispensary of Bath, unmarried, aged 31. She had been confined, after a long and lingering labour, in Bristol, six months previously; she soon recovered, in a week being up and about her usual avocations. After the lochia had disappeared a leucorrhœal discharge set in, accompanied with pain in the back, and a bearing down. She was attended professionally, but received little benefit. About two months prior to her applying to me, blood appeared with the discharge at times, and to the extent of several ounces. This continued up to the time of my first seeing her, when she was weak and much emaciated; complained of headache and loss of spirits and appetite. On examination, the cervix was found low in the vagina, greatly enlarged, and considerably indurated. The speculum discovered an ulceration of at least an inch in its widest diameter on the right side of the cervix, covered with florid granulations, and raised above the margin of the surrounding texture. The mucous membrane was much injected; the os uteri open. In this case also the nitrate of silver was freely applied, and rest enjoined. A sulphate of zinc injection, and the usual remedies for restoring the lost tone of constitution, were prescribed. After nine weeks' treatment (the nitrate having been applied over the whole of the cervix once, occasionally twice, a week,) the ulceration was healed, the leucorrhœa with its accompanying symptoms had left her, and her health was vastly improved. I examined this patient about three weeks after she had ceased attendance at the dispensary, and found the cervix in a normal condition and position.

III.—Case third is that of a lady, aged 40 years, mother of six children, who applied to me in April, 1845, under the following circumstances:—In January of the year previous she became pregnant, and soon after, leucorrhœa set in, accompanied with pain in the hypogastric region, a sense of weight on standing, and great irritability of the meatus urinarius, causing frequent desire to micturate. These symptoms continued, without medical advice, and on May 7th she aborted; a large quantity of blood was lost, and for three weeks she was confined to her bed or couch. After this most of her former symptoms disappeared, excepting a slight dragging sensation of a sickening character, as she described it, whilst standing long, especially if she had previously walked. In the November following she again became *enceinte*, and about two months after the old symptoms re-appeared; and not valuing them as she should, she allowed them to continue, without seeking advice, until the commencement of March, 1845. At the fifth month she again miscarried. The uterine symptoms continuing, I was consulted in April. I found the digestive organs disordered, and her general health was unsatisfactory. She complained of deep seated hypogastric and lumbar pains, and a distressing sensation on standing; the leucorrhœa was trifling. On examining, the cervix was found lower than usual, and its density as well as volume increased; it had much resistance, and was tender. The speculum disclosed the os uteri patulous, and entirely engaged with ulceration, extending from which were two small patches of ulceration, about the size of a fourpenny-piece, the one anterior, the other on the right side of the posterior lip; both had dark red granulations, much depressed below the surface of the surrounding part, and bled on the speculum pressing. The whole of the cervix and upper third of the vagina were much congested; the former I freely incised in several places, which bled freely. A warm bath was ordered, and a warm opiate injection to be used night and morning; a mild laxative was prescribed, and rest enjoined.

Three days after this I again examined; the congestion was much relieved; the nitrate of silver was now first applied to the ulcerations, as well as slightly

to the whole cervix and upper fourth of the vagina. Oxide of zinc with extract of conium was ordered twice a day, and a grain of the mercurial pill every night. This plan of local treatment was continued to the commencement of July, when the volume and density of the cervix had considerably lessened; the ulcerations had healed with the exception of the margin of the os uteri, which was still ulcerated and open; the pencil of nitrate of silver was introduced about two lines, and repeated five times, when all *visible* mischief disappeared. There still, however, continued a muco-purulent fluid exuding from the os uteri, and accordingly I introduced a probe with a little lint, wetted with a solution of the nitrate, on three occasions, at a week's interval, when the character of the discharge altered to that of a transparent mucus. In the November following she became pregnant, and in August, 1846, I attended her at the full time in her accouchement.

IV.—The next case is that of a female, 46 years of age, mother of two children; has been a widow two years. A bearing-down and leucorrhœa have afflicted her for three years; she has procidentia uteri, but no complete prolapsus; menstruation is not deranged; complains of pain in the back and behind the pubis, aggravated when the bowels are relieved. The discharge varies; sometimes it is white and very abundant, at others thin and streaked with blood, but never offensive. She had previously been healthy and stout, but now is much emaciated. She has had many remedies tried, but the disease was never investigated by the speculum. Examining with the finger, the vagina was very relaxed; the cervix uteri very large and a little indurated; the os patulous and its edges thick. There was little tenderness except over the posterior lip, where the speculum discovered a large irregular ulceration, an inch in its longest diameter; the granulations were numerous and on a level with the surrounding part. The nitrate of silver was applied freely over the whole cervix; an injection of nitrate of silver was prescribed, and the citrate of iron ordered twice a day; the cold hip-bath directed to be used if practicable. The caustic in this case was applied at intervals of a week, (occasionally oftener,) for six months; during one month of this time a vaginal suppository of belladonna and mercurial ointment was inserted every other night. At the end of this time, the ulceration had healed, the discharge had all but ceased, and the system had recovered a healthy tone. The size of the cervix and body of the uterus had much diminished, as evidenced by examination, as well by the rectum as by the vagina. The procidentia was so much relieved that she could walk about with comfort without the aid of any bandage.

V.—The last case is that of a young woman, aged 32 years, at present under treatment at the Eastern Dispensary of Bath. I am desirous of relating it, as it presented the most extensive ulceration I have met with in a young unmarried woman. I have made many inquiries relative to her character and believe her to be a highly respectable and chaste young female. She applied to me on the 11th of June, at the request of the physician who last attended her. She states she has been suffering from constant pain in the back; a burning deep-seated pain in the pelvis; a discharge, muco-purulent in character, and varying in quantity, occasionally tinged with blood; and debility upon the increase between three and four years. During this time she has been the patient of several of the Bath medical practitioners of the highest repute. Two of these gentlemen diagnosed ulceration of the uterus and treated it with astringent injections, and the system with tonics generally. The circumstance just mentioned I wish to call especial attention to, as it shows to how lengthened a period ulceration may extend unless topically treated, and how rapid the cure when such treatment is put in operation. At the time of this patient first applying to me, the symptoms above mentioned were in full vigour, added to which, she mentioned that walking had been so painful as almost to be impracticable, and that there had been much dysmenorrhœa, which had increased during the last twelve months. Prior to her first noticing her uterine symptoms, menstruation was always perfectly natural. Dyspeptic symptoms had also become very prominent. An examination with the speculum was at once permitted on an explanation of its uses, and the probable benefit which would accrue to her. The vagina was small and along its upper half of a red purplish hue; the cervix was tumefied but soft, and of a uniform red colour; the anterior lip was the larger. The os uteri was patulous, and its whole margin ulcerated; the ulceration extended in an irregular way over nearly one half of the posterior portion of the cervix, and was uneven and very deep. The touch of the speculum was painful and occasioned a little blood; the same effect was produced by the slightest touch of a piece of lint. The mucus from the os uteri was of an opaque white colour. I immediately applied the lunar caustic to the whole of the ulcerated cervix; no pain was occasioned; an injection of sulphate of zinc and opium, and a mixture of the infusion of gentian with solution of potass, were prescribed, as also a pill every other night of mercurial pill and extract of hemlock.

On the 22nd she again attended, when she stated all her symptoms had abated; the ulceration and tumefaction of the cervix were decidedly diminished. The caustic was again applied, and from this time was used twice a week, (with one exception during menstruation, which by the bye, was attended with considerably less pain,) up to the 13th of this month, when the cervix was seen reduced to almost its normal size, and the whole of the ulceration healed, except that round the os, which had become superficial. The cervix and mucous membrane of the vagina had resumed their dull pale colour. The system generally had become strengthened, and the dyspeptic symptoms had all but vanished.

Since the above was written I have again examined this patient,—viz., on Tuesday last, July 20th, and found all visible trace of ulceration gone; there was a little gaping of the os uteri, and the uterine passage, as far as could be examined, appeared a little red and injected; she had lost all bearing-down sensation and all leucorrhœa, and represented herself as being better

than she has been since uterine symptoms have troubled her.

The remarks, Mr. President, which I shall make upon these cases, are not very numerous; but before doing so, I would call your attention to this fact, that the five cases I have now detailed have been selected out of many I have met with in private and dispensary practice, and therefore each may be considered as representing a class of cases, with the exception of the last, this being only the second case of the disease I have treated in a young unmarried female. I am desirous not to be thought to draw conclusions from individual examples.

In the first case described, the cause of the ulceration was evident, arising from vaginitis, extending to the cervix uteri,—a not unfrequent occurrence in a greater or less degree in the early days of marriage. A prominent symptom during the thirteen months prior to my seeing her was dysmenorrhœa, a circumstance to which I shall refer bye-and-bye, and to which I would peculiarly call your notice. It is interesting also to observe that this patient remained sterile during the time that the disease was existing; but about six weeks after the cure was complete, pregnancy took place. The same cause which I shall speak of bye-and-bye, in relation to dysmenorrhœa, will readily account for it,—viz., the partial blocking up of the uterine neck by congestion, and the mucopurulent discharge. Dr. Bennet, in his treatise, states that he is inclined to believe that pregnancy does not take place whilst the patient is suffering under this disease, but he has since narrated, I think, a case, and one in my own practice clearly proves its occurrence. I have been asked whether the introduction of the caustic pencil into the os uteri does not tend to contract or altogether close up the passage. The above case, with others, sufficiently answers the query.

In the second case narrated, the symptoms came on directly after a tedious labour, where, doubtless, excoriations of the os uteri had been produced. Getting about again earlier than consistent, congestion was favoured, the lacerations did not heal, and thus inflammation and ulceration succeeded. Pregnancy certainly predisposes to this affection, and a laborious labour or abortion is sure to occasion congestion, and very frequently excoriations, around the cervix.

In the third case related, abortion was evidently occasioned in two instances by the disease; and it is worthy of remark, that the second pregnancy appeared to light up the disease after it had apparently been cured. This we should, *a priori*, anticipate, that congestion, or ought that favours increased circulation in the part, might develope or encourage the continuance of it. I cannot speak positively, but there is every reason to believe that this individual became pregnant whilst suffering in a slight degree from the evil.

In the fourth case, a procidentia uteri existed as an effect of the disease; the body and cervix uteri were in a condition of chronic hypertrophy, and it must be apparent to every one, knowing how the uterus is balanced, as it were, in the pelvis, how readily the slightest change in its volume is liable to alter its position. I feel confident that many, very many, cases of procidentia uteri may be traced to this cause. I may remark that I have found the employment of vaginal suppositories most beneficial in uterine diseases; the use of them in the case before us was of marked benefit in diminishing the size of the cervix, and relieving irritation.

The last case I have drawn up to exhibit the extent at which the disease will arrive in a young unmarried woman, and to show how inefficient treatment is that is not directed to the seat of the disease. At the end of the six weeks during which this patient has been subjected to the cauterization, she is comparatively well; the improvement too in her general health has kept pace with the local improvement. I have also related it to show peculiarly a connection between ulceration of the neck and dysmenorrhœa. I have for some months noticed this connection in several cases which have fallen under my observation, but especially so in the case before us, and also in one other which I regret to say I kept no notes of. It was in a lady of 27 years of age, who had suffered from dysmenorrhœa in an extreme degree for six years. Many and various had been the remedies advised by almost as many medical men, when I proposed the employment of the means recommended by the late Dr. Mackintosh, of dilating the os uteri by the aid of bougies, which I had long desired to put in practice. An examination, however, with the finger, discovered to me an irregularity and tenderness abont the os uteri, the whole cervix appearing swollen. The symptoms which she certainly had of ulceration were all saddled by me upon the dysmenorrhœa. This being the case, I had a small speculum made, and on introducing it found the margin and neighbourhood of the os superficially ulcerated. I applied lunar caustic, and had the satisfaction of seeing her entirely cured of her dysmenorrhœa in about three months. I was thus led particularly to notice the symptom of painful menstruation in all the cases I have since had of congestion and ulceration of the neck of the uterus, and in those where the uterine passages were most concerned, this symptom was prominent. Such being the case, might not many of the most obstinate cases of dysmenorrhœa that we meet with be thus accounted for, and thus relief obtained for that, "the frequent return of which," as Dr. Mason Good says, "embitters the life of the patient." Certain it is, the case I just spoke of, I at first treated as a case of dysmenorrhœa, thus mistaking a symptom for the disease. In this fifth case at the dispensary I should assuredly have done so too, had not my attention been previously aroused. These observations seem to

confirm the views of the late Dr. Mackintosh and Professor Simpson, relative to the cause of some cases of dysmenorrhœa,—viz., a naturally contracted uterine passage; the same effects are thus seen to arise from the passage contracted by disease. The cause of the dysmenorrhœa, I conceive, cannot be difficult of explanation, when we remember the uterine passage is contracted, perhaps closed, by the congestion of the neck of the uterus; the menstrual fluid, after being secreted, becomes blocked up in the womb, which, on being distended, contracts on its contents to overcome the obstacle, thus producing pains, greater or less, according to the amount of obstacle which the uterine passage affords. Many authors in writing of dysmenorrhœa, refer to violent spasmodic uterine and bearing-down pains, and violent expulsory efforts. Dr. Good states, in continuation of the passage above, that the disease "effectually prohibits all hope of a family, for if impregnation should take place in the interval, the expulsory force of the pain is sure to detach the embryo from its hold."* The cause of the ulceration in the case of this young woman is altogether hidden, I cannot learn that she has had metritis or any other disease likely to set up the mischief. Whether unnatural sexual excitement from self-abuse has anything to do with this affection, as a cause in young females, I am not prepared to say anything about.

It may be observed I have used only the nitrate of silver as a caustic; twice, however, I have employed the nitric acid and weakened potassa fusa, but their application was so difficult and violent, so uncertain in their extent and management, that I have since used only the lunar caustic, and really find it as efficient as I could desire. As to the Vienna paste of the surgeon of La Pitiè, and the per-nitrate of mercury and actual cautery of Jobert, I know nothing of either by experience, nor would I advise a trial while the good can be wrought which I have seen with the nitrate of silver.

I am afraid I have already taken up too much of your time, but I have been desirous of calling attention to this important disease, believing it to be a common source of much suffering, and one too frequently overlooked, its effects being more often treated than the disease itself. My own experience enables me to make the following deductions, with which I shall conclude.

1st. That dysmenorrhœa is occasionally only a symptom of this disease, resulting from congestion and ulceration of the cervix and os uteri.

2nd. That sterility is a most frequent attendant, though not, as has been considered, a necessary condition, the mechanical obstruction in the uterine neck being sufficient to account for it, as in dysmenorrhœa.

3rd. That abortion is occassionally produced by it; when it does occur the disease is commonly aggravated, sometimes altogether lit up by it.

4th. That when the os uteri as well as the cervix, is ulcerated, the mischief extends from the former to the latter. The os uteri is generally the last part to yield to the remedies. In the treatment it is well to remember this fact.

5th. That in the generality of cases that have occurred to me, the nitrate of silver has answered all the purposes of an efficient caustic, and that I cannot but view the actual cautery, the Vienna paste, the pernitrate and acid nitrate of mercury, as well as nitric acid applications, of too violent a character for ordinary use to that portion of the body.

Before sitting down, Mr. President, I am anxious to state some particulars relative to the above remarks upon dysmenorrhœa. My friend Mr. Bartrum, requested me in the beginning of last week, to write a paper to be read this day, and having the remarks just read put together with the intention of sending them to one of the journals, I consented. During the week, I mentioned to two or three friends the views which I have now brought forward, but on looking over the *Lancet*, of July 17th, I observed the paper by Dr. Bennet, and was surprised to find that he had advanced views all but similar; without reading further I took up my paper and read parts of it to two friends. On returning home I immediately wrote a letter to Dr. Bennet, in which I stated the above to him, and also expressed a hope that should he hear of my reading this paper to day he would give me the credit of believing that the observations made relative to dysmenorrhœa were made some time since, and in entire ignorance of his opinion upon the matter. I felt as I expressed to him, that I could not read this to you, without speaking first to him, lest he might construe my observation as piratical. I feel also that this explanation is due alike to you as to myself. In return I have received from Dr. Bennet a very polite and flattering letter, in which he states, in connection with my experience upon the matter,—"My mind is thus relieved of a fear, which, I must confess I entertained, and which prevented my publishing on the subject a full year ago,—viz., lest I should be accused of indelicacy, and of promulgating views impracticable on that ground. Nothing indeed can give me greater pleasure than to find another practitioner arriving at the same results as myself, as it is a guarantee of the ultimate success of my endeavours to establish uterine pathology in this country on a sound and real basis."

* "Good's Study of Medicine," Vol. v., p. 48.

CASE OF WOUND OF THE INTERNAL CAROTID ARTERY, AND DIVISION OF THE PAR VAGUM, IN WHICH THE COMMON CAROTID ARTERY WAS TIED.

By Samuel Wright Fearn, M.R.C.S., F.G.S.

(Read before the Provincial Medical and Surgical Association, at the Anniversary Meeting, at Derby, Thursday, August 5th, 1847.)

The rarity of the occurrence of a case of wound of the internal carotid artery, in which there is any opportunity of rendering surgical assistance, will, I trust, be a sufficient apology for intruding upon the valuable time of the meeting, whilst I relate, as briefly as is consistent with a full exposition of its most interesting features, the particulars of a case which has recently fallen under my professional care. The notes, as originally taken, during a period of upwards of eleven weeks, are very voluminous; but as it would be trespassing unnecessarily upon your attention to read the whole of them, I shall present to you, in as condensed a form as I can, the most important part of the details.

On Tuesday, February 2nd, 1847, Mrs. Osborn, aged 68, of spare habit and nervous temperament, (about five o'clock in the afternoon,) was savagely attacked by a man, armed with a pruning knife, who inflicted three severe stabs on the left side of the neck, and several others, of a more trifling nature, on the jaw and over the larynx. The most profuse hæmorrhage immediately followed, inducing syncope, and a state of insensibility, which continued for about an hour. Several medical gentlemen were shortly in attendance, and in about three quarters of an hour from the time of the injury I first saw her, having been from home when first sent for. I found her in a state of extreme exhaustion, lying upon the bed, her clothes saturated with blood, aad barely able to recognize any one about her. There was a deep wound about three inches in length immediately behind the angle of the jaw, extending perpendicularly downwards; another, a jagged wound, over the transverse processes of several of the middle cervical vertebræ, and a deep gaping wound midway between the occipital spinous process, and the mastoid process of the temporal bone; the other wounds being slight, need not be particularly described. There was a slight oozing of blood, but I was unable to discover that any large arterial trunk had been injured. A ligature had been placed upon a small superficial vessel, by Mr. Harwood, before I arrived. After waiting some time, the wounds were dressed, and brandy-and-water, as far as the difficulty of swallowing would permit, was freely administered. The other medical gentlemen left the house, but I remained in attendance upon the patient.

At seven o'clock, whilst I was in an adjoining room, she got out of bed to the night-chair, when a most alarming return of the hæmorrhage took place. I was hastily summoned, and immediately stopped the bleeding by pressure. On removing the dressings I found the blood issued from the wound behind the angle of the jaw; it was arterial, and came forth in a stream as large as a swan-quill. Convinced that some large arterial trunk must be wounded, and most likely the internal carotid, I directed additional medical aid to be sought, in order that I might be able at once to adopt some decisive proceeding to restrain the hæmorrhage. My friends Mr. Johnson and Mr. Borough being fortunately at hand, and agreeing with me that it would be impossible to get at the vessel in the situation of the injury, it was determined to place a ligature on the trunk of the common carotid.

I pursued the usual steps in the operation, and having opened the sheath of the vessels, I passed an armed aneurismal needle from without to within beneath the carotid, and when the gentlemen present had satisfied themselves that the artery was properly secured, the ligature was firmly tied. Only a few drops of blood were lost during the operation, which took about ten minutes for its completion, and was admirably borne by the patient, no expression of suffering or additional discomfort having escaped her. The hæmorrhage from the wound at once ceased, and the proper dressings having been applied, she was directed to be kept as quiet and free from excitement as possible, and a little tea and brandy and water to be given at intervals.

The patient had much trouble to make herself understood, and there was considerable difficulty in swallowing, but whether this arose from debility, or from injury to the pharynx and glottis, it was not possible to make out. Each time when she swallowed, the liquid seemed to get within the glottis, occasioning cough and retching, and many times during the night she vomited a dark-coloured fluid. I give this last portion of the notes as it was written at the time, but it will be seen in the sequel, when we come to the *post-mortem* examination, that the suffocative cough and difficulty of swallowing are abundantly accounted for by the fact that the nervus vagus was divided.

It should be mentioned here, that in defending herself from the attack of the assassin, the patient received a severe wound in the palm of the right hand, over the head of the metacarpal bone of the forefinger. This wound divided the flexor tendons and digital artery, and opened the capsular ligament of the joint. To take an anodyne draught every third hour.

February 3rd, 7 a.m. I have remained in attendance upon Mrs. Osborn all night; the pulse has maintained a speed of 140, and has been feeble; more decided re-action now seems to be taking place; there is considerable heat of skin, and the pulse is increasing in volume; the thirst has been very urgent, and she has repeatedly taken tea, cold water, and cold brandy-and-water by tea-spoonfuls. The difficulty of swallowing is very distressing.

3 p.m. Much the same; pulse 120, very full and throbbing.

Midnight.—But little change since last report; has slept for a short time at intervals.

4th, 7 a.m. Has passed a restless night, and has constantly wanted a change of position; has just now become suddenly worse; the pulse is fluttering and

intermittent, and she is unable to speak or to swallow; she lies with the mouth open, and there is a good deal of rattle in the throat.

1 p.m. Shortly after last report became insensible, and since then has lain in a state of stupor. There is considerable heat of skin, and perspiration; the pulse has lost its irregular character, and is full but compressible, 120.

4 p.m. Is now quite sensible, and able to converse in a whisper; has swallowed tea and cold water, and altogether appears to have rallied a good deal; pulse of good strength, 120; breathing tranquil.

7 p.m. Complains of cough. Habeat Linct. Oxymellis cum Opio, more solito. Bowels not open since operation. To have an injection of warm gruel and salt; to have arrowroot made with water, and a little brandy added. Pulse 115, with an intermission every twelfth beat.

11 p.m. Is much better; breathing tranquil; less difficulty in swallowing; pulse 100, and regular.

5th, 8 a.m. Rested comfortably till half-past two, since then has been uneasy; she has taken, however, several times, a little tapioca and isinglass; is now feverish, and the pulse 102, has again become irregular; bowels not yet moved. To take an aperient draught.

Vespere.—Has suffered severely during the day from pain in the abdomen; the pulse at times regular, and at others intermittent, has ranged from 100 to 180. Had an injection of warm gruel and castor oil in the afternoon, which acted copiously, after which she expressed herself as much relieved. To take at intervals an opiate draught.

6th, 8 a.m. Is much better; has had some refreshing sleep in the night, and has taken nourishment repeatedly.

Vespere.—Bowels acted freely at mid-day. Dressed the wounds, from which there is slight thinnish secretion.

7th, 9 a.m. A tolerable night; slept from twelve to three; is a good deal exhausted; skin moist; pulse intermittent, 108. To have beef tea at intervals.

Vespere.—Secretion from wound more puriform; wound made in operation, except at the point of ligature, has united by first intention; there is great throbbing pulsation in the carotid up to the ligature; is pretty comfortable.

9th. Has been much the same the last two days; has complained of much pain in the wound of the hand, to which, as well as to the wounds of the neck, water dressing has been applied; there is a good deal of cough and frothy expectoration; has had the bowels open from an injection, and takes the opiate draught occasionally, with a good effect; swallows more easily.

11th, 5 a.m. Has had a bad night, coughing almost incessantly, and the difficulty of swallowing has become as bad as ever; pulse feeble, 104; perspires freely, and feels low and exhausted, having taken scarcely anything during the night. I got her to swallow a tea-cupful of beef tea with much difficulty, the liquid at each effort seeming a little of it to get within the glottis, producing cough and sense of suffocation.

Vespere.—Has rallied a little, and has taken during the day a little milk porridge and beef tea.

12th, 2 a.m. Bleeding from wound of hand. Applied compress and bandage. Wounds of neck looking healthy, discharge less, and are healing.

15th. Has been very irritable and restless the whole night, and at times wandering and insensible; has taken but little nourishment, and is altogether not nearly so well.

11 a.m. Summoned in great haste to her as she was supposed to be dying. Found her extremely sunk and exhausted; skin clammy; pulse feeble and irregular, 150; does not complain of pain, but says she is very ill; got her to take some brandy and water, and later in the day some port wine.

In the evening she had rallied somewhat and complained for the first time of pain in the left ear. The pulse was still irregular, 108.

16th. Has had several hours sleep in the night, and feels much better; skin clammy; pulse steady, 104. To have wine and brandy and water at intervals.

20th. Much the same train of symptoms the last three or four days; at times great exhaustion and inability to swallow, and much trouble from the cough and abundant tracheal secretion, the pulse varying almost hourly in speed, volume, and regularity. To day the hand is very painful and there is a considerable fluctuating swelling over the injured joint. I have opened it and evacuated about an ounce of well-formed pus. There is a grating sensation communicated by moving the joint, occasioned probably by erosion of the cartilage. The wounds of the neck are healing gradually.

22nd. Ligature came away. Has suffered very much since last report from the choking and suffocative cough, and at times the faintness and exhaustion have been so extreme as to occasion great alarm. Is obliged to take frequently as far as she is able wine and brandy and water.

March 6th. Continues much in the same state; is able to take but little nourishment; suffers greatly from the pain of the hand, which discharges pus copiously. The joint being evidently diseased, I got my friend Mr. D. Fox to see the patient, and as he concurred with me in the propriety of removing the finger, I have done so immediately behind the head of the metacarpal bone. There was no bleeding to require a ligature.

10th. Has been much easier since the removal of the finger; the wound looks well, and is healing favourably; the cough and difficulty of swallowing are, however, very distressing, and she is taking but little nourishment. To have a blister to the chest, and to take the following:—R. Sodæ Sesquicarbon., dr. ij.; Mucil. Acaciæ, oz. ij; Tinct. Scillæ, dr. iij.; Tinct. Camph. Co., dr. vj.; Acidi Hydrocyanici, m. xij; Aquæ ad oz. viij. M. Sum. oz. iss. quartis horis.

15th. Still coughs a good deal, but expectorates more easily, and there is less trouble in swallowing; appetite improving. To continue the cough mixture. The wounds of the neck have been healed about a week.

April 4th. Matters have gone on much the same since the last report; the cough has continued to give much trouble; there is very abundant tracheal and

bronchial secretion, but little râle can be perceived by applying the ear to the chest, and I consider the secretion comes principally from the trachea and larger bronchial tubes. There is less strength than there was a month ago, and there is too much reason to fear she may ultimately be exhausted by the cough. Another blister has been applied to the chest, with some relief, and various cough medicines have been tried. The pulse is usually about 110. She takes but little food now.

11th. More prostrated and feeble; sleeps much; complains of pain at the vertex, and a coldness of the left side of the head; pulse variable in speed and volume, and at times intermittent, ranges from 100 to 160; still much muco-purulent secretion in the air-passages, which is easily expectorated; urine abundant, and of natural appearance as it has been throughout. I have repeatedly urged the use of broth injections, but she refuses to have them administered.

22nd. Mrs. Osborn died this morning a little before nine o'clock, having lingered since the last report in a state of the most extreme exhaustion, feebleness, and emaciation. For many days she has taken little else than cold water. She has suffered much latterly from the pain at the vertex, and in the ear, and along the course of the vessels on the left side of the neck. She died without a struggle.

Post-mortem examination ten hours after death.—Present—Dr. Heygate, Messrs. Wright, D. Fox, Borough, Greaves, and Taylor.

Body extremely emaciated. Heart loaded with fat; lungs did not collapse on opening the chest; the left lung a good deal congested posteriorly, and the right also congested posteriorly, but to a less extent; there was much frothy muco-purulent matter in the larger bronchial tubes, and the bronchial membrane was much injected. In the neck, at the site of the ligature, the cellular membrane was condensed and firmly adherent to the adjoining structures; the point of ligation was well marked, and the artery was filled with a dense brownish-coloured fibrinous coagulum, which commenced about half an inch from the origin of the vessel; the artery was considerably diminished in size; above the ligature, and especially at the bifurcation, the vessel was contracted and hardened, and contained the same kind of fibrinous coagulum, but in a proportionately less quantity; in this situation, too, there was a very minute abscess in the coats of the artery; the posterior face of the internal carotid, immediately above the point where it is given off from the common trunk, presented a well-marked appearance of the wound which had furnished the alarming hæmorrhage at the time of the injury, and in the same situation the *par vagum* was found to have been divided. (I have since found, in examining the parts after they had been some time in spirit, that the reddened line which had indicated the point of injury of the vessel, at the time of the dissection very distinctly, has disappeared from the maceration. The edges of the wound had closely united, and there is no trace of the wound on the internal coat of the artery. This condition of the parts is similar to what is stated to have occurred in the experiments of Béclard, and the *possibility* of which is likewise affirmed by Chelius. It should be stated that the wound of the vessel was *oblique* or *diagonal*, and that it had a length of about two lines. The vessel in the situation of the injury is perfectly permeable, and there is no appearance whatever of the "plug of plastic matter" observed in the experiments of Saviard, Petit, and Scarpa.*) The lower extremity of the divided nerve was shrunk and atrophied, and there was a slight enlargement (a neuroma,) at the extremity of the upper divided end; there was no observable indication of wound, either of the pharynx or glottis; the subclavian artery of the left side, and the innominata with its chief and lesser branches, appeared to me to be of unusually large size. The viscera of the abdomen, and the contents of the cranium, were not examined, the friends of the patient being unwilling that any further investigation than of the parts immediately implicated should be made.

Remarks.—The chief points of interest in the foregoing case, may, I think, be briefly stated to be the following:—1st. The extreme rarity of the occurrence of a case of wound of a vessel of so much importance as the internal carotid, in which there is any opportunity of rendering surgical aid. 2nd. The difficult deglutition and imperfect closure of the glottis in the act of swallowing. 3rd. The excited and variable state of the circulation; and lastly the engorged condition of the pulmonary vessels, and the consequent suffocative cough and abundant bronchial secretion.

With regard to the first point I may state that I have been unable to meet with more than one recorded instance in which the internal carotid was *proved* to have been injured and in which the common carotid was tied. The case is related in Mr. Cooper's admirable Dictionary, and was under the care of Andersch; the common carotid was tied after a wound of the internal carotid, and the patient died on the eighth day. In the present case life was prolonged beyond the eleventh week and looking to the state of the parts as revealed by the *post mortem* examination, we may fairly be permitted to regard it in a surgical point of view as successful.

Secondly, the difficulty of swallowing and imperfect closure of the glottis, which in the first instance were, perhaps very naturally, attributed to some injury of the pharynx and upper part of the respiratory tube, are beautifully explained by the fact of the *par vagum* having been divided. As one effect of this injury must be a paralysis of the recurrent laryngeal nerve, (a motor nerve,) and as it supplies, as I need hardly remind you, the inferior constrictor of the pharynx, and the crico and thyro-arytenoidei muscles, we are at no loss to understand the double embarrassment of the patient in the act of swallowing. Indeed so great was the distress occasioned, that at times it was almost impossible to prevail upon her to take even the small quantity of nutriment necessary to sustain life.

* *Vide* "Chelius' Surgery by South," Vol. 1, p. 298.

The third and fourth points of interest,—namely, the irregular and hurried state of the circulation, and the difficult respiration, may properly be considered together. The irritation in the air-passages, and the abundant secretion and cough, arose probably from congestion of the pulmonary vessels, which I imagine to be caused by the sudden closure of one important outlet from the left side of the heart. It would naturally follow, if the free egress of the blood from the left ventricles were prevented, that the pulmonary veins must become engorged, and indeed the whole thoracic circulation must be obstructed—a condition which would give rise to great irritation of the pulmonary organs, and the abundant mucous secretion present in this case. A precisely similar state of things occurred in my patient, Mary Scattergood, upon whom I operated for aneurism of the arteria innominata, both after the ligature of the common carotid, and subsequently after tying the subclavian artery. I find too from an excellent paper by Professor Miller, of Edinburgh, in the *London and Edinburgh Monthly Journal of Medical Science*, 1842, that in the majority of the fatal cases of operation on the large arteries of the neck, he considers death is attributable to inflammation of the lungs; and my friend, Professor Fergusson, of King's College, seems to incline to the same opinion. Of course, under common circumstances, our sheet anchor in combating such symptoms would be repeated blood-lettings, and the administration of opium; but in the case of Mrs. Osborn, there were such frequent and alarming attacks of syncope, and the utter prostration and exhaustion from the loss of blood at the time of the injury were such, that we were repeatedly driven to the employment of stimulants in large quantity, when other symptoms seemed urgently to demand an antiphlogistic mode of treatment. In short, the advanced age of the patient, and the absolutely drained condition of the vascular system, in spite of the local engorgement, forbade the use of any other remedies than opiates, expectorants, and counter-irritants, due attention being at all times had to the state of the primæ viæ, and the persevering and almost hourly administration of nutriment.

I have not thought it necessary to make any observations on the operation of ligature of the carotid, but I may be pardoned, perhaps, for shortly pointing the attention of the meeting to a suggestion of my esteemed friend, Mr. Sibson, of the Nottingham Infirmary, in reference to it. In a case of aneurism of the right common carotid, in which the vessel was successfully tied by Mr. White, of Nottingham, Mr. Sibson advised that the patient should expire forcibly before the commencement of the operation, and that the chest should be firmly bandaged, the patient, during the operation, being directed to breathe as much as possible by the aid of the diaphragm and abdominal muscles alone. This expedient was accordingly adopted, and had the effect of materially facilitating the steps of the operation. The neck was thereby considerably lengthened, and the alternate rising and falling of the sternum and clavicle, and the emptying and refilling of the cervical veins, in great measure prevented. It has also, according to Mr. Sibson, the very desirable effect of preventing the descent and deepening of the carotid during the inspirations.

HISTORY OF A CASE IN WHICH A MASS OF FOREIGN MATTERS, CONSISTING OF HAIR, WOOL, RAGS, THREAD, &c., WAS EXPELLED PER RECTUM.

By Edward John Spry, Esq., Surgeon to the Royal Cornwall Infirmary.

(Read at the Annual Meeting of the South Western Branch of the Provincial Medical and Surgical Association, held at Truro, July 16, 1847.)

A. C., a young woman, aged 16, voided with excessive pain, on the 12th of March last, two large lumps of foreign matters, the first about the size of an ordinary pullet's egg, the second larger and longer, much compressed, and very hard, having a thin albuminous coating, which served to conceal the character of the contents of the lumps until forcibly separated. After having been carefully washed and dried, the materials of which the masses were formed were found to be numerous small parcels of dyed wool, of various colours; of hair, of different colours; of thread; of worsted; and of cotton and linen rags, all compactly fitted together, and weighing one ounce and five drachms, avoirdupois.

At the time of passing these lumps she was so reduced, by a severe illness of many months, as to be quite unable to sit up, and her mother was under the necessity of holding her in the sitting posture, whenever she attempted to relieve the bowels, so that she had the very best evidence of their expulsion from the rectum. She took them immediately to a pump in the yard, and having procured two sharpened sticks, she endeavoured to separate the materials of which they were composed, but it required considerable effort on her part, and the long continued pressure of a large stream of water, to accomplish the task. The patient had been so reduced by her previous illness, of which I will give an outline presently, as to give up all hope of recovery; and when I visited her on the day following this event, I asked her in the presence of her parents, and in the full consciousness of her critical condition, if she recollected having swallowed any part of the matters evacuated. She most solemnly assured me that she did not, and her parents added that they firmly believed her statement. The mother then said, in reply to a question which I put to her, as to the possibility of her obtaining access to such things, that when her daughter was learning to walk, she could get at the seat of a settle in the kitchen, by the edge of which she held, and that the children often amused themselves by turning over the contents of this box, in which old rags of all sorts were deposited;

that she believed her daughter must have then indulged in the odd fancy of swallowing the various matters now presented to your notice.

My attendance on this young woman commenced in September, 1846; she was then in an anæmic state, complaining of general debility. The usual treatment was adopted, and her health improved. The catamenia appeared slightly about two years before, and then ceased.

On the 30th of October, I was again requested to see her, and found her complaining of severe pain in the bowels, and her mother directed my attention to a considerable swelling, just below the margin of the right ribs, and occupying the whole of the right hypochondrium. This tumour had a well-defined edge extending toward the epigastrium, and firm pressure on it occasioned pain. Leeches and fomentations were diligently employed, succeded by alteratives and frictions of iodine, but with little result. Rigors came on; severe darting pains were felt, requiring her to take frequent doses of the solution of the acetate of morphia, in addition to the fomentations and general treatment. The symptoms indicated the formation of abscess, and I prepared the parents for that event. Bilious vomitings soon after this came on, and on one occasion she brought up a large quantity of green bile and pus, streaked with blood. This was repeated at intervals, and her strength rapidly gave way; the pain she felt at times was excruciating, and she was reduced to a mere skeleton.

In this condition she was when Dr. Barham visited her on the 13th of November, and it appeared to us that there was very little opportunity left but to carry out the principle of the Euthanasia, scarcely considering that there was a chance of her recovery.

As she resided seven miles from Truro, I saw her very seldom after this period, and on one of my visits her mother said that she thought the swelling had shifted more to her left side, which on examination I found to be so far correct, that in consequence of her great emaciation, a tumour could be readily felt in the descending colon and left iliac fossa; but the original swelling in the hypochondrium was not much reduced, it was softer. I directed the same plan to be continued, fomentations, friction of the bowels with anodyne embrocations, the occasional use of morphia, with every nourishing preparation that her appetite would permit her to take, to support her strength. One remarkable circumstance attending this illness was the regular and easy evacuation of the ordinary contents of the bowels, which were for the most part of a natural colour and consistence.

January 9th, 1847. I found her much easier, and the whole abdomen softer; the sickness had subsided, but as there was still considerable swelling in the right side, I was induced to give her, with some tonics, small doses of the solution of the bi-chloride of mercury, which she continued about a month with apparent benefit. Her appetite had improved, and she had gained a little flesh.

From this time she took little medicine, but wore a belladonna plaster over the epigastrium to relieve the occasional pains she felt there. I heard of her from her friends, who described her state to be fluctuating, still suffering acutely at times, and requiring now and then a dose of morphia, and so she continued until the 12th of March, when the singular evacuation was effected, with a description of which the case was commenced. From that time she steadily improved, and on the 3rd of July she was able to come to Truro. She appeared healthy, and fresh-coloured. She had grown considerably. The bowels acted regularly, although now and then she suffered severe pain, and her digestion was languid. The catamenia have been regular for the last three periods.

DISLOCATION OF THE HIP-JOINT, REDUCED UNDER THE INFLUENCE OF ÆTHER.

By E. F. Dehane, Esq., Surgeon to the Dispensary, Wolverhampton.

Thomas Connelly, a strong muscular man, employed as a furnace-man in the neighbouring iron works, was brought to the wards of the Dispensary on the 15th instant, under the following circumstances:—He was getting over a stile, when his foot slipped through the bars, his body falling in an opposite direction, by which his leg had to sustain the whole weight of the body, which acted as a lever against the leg and thigh; the consequence was, that the head of the femur was dislocated into the foramen ovale. The accident occurred four days before admission. On examination it was found that the limb was elongated to the extent of three inches, the heel elevated from the ground, the toes slightly everted, the knee advanced, and the thighs separated from each other; any attempt to handle the parts produced exquisite pain.

Now I thought this, in conjunction with my colleague Mr. J. Cartwright, and Mr. Pope, the House-Surgeon, a proper case for the exhibition of æther, which he inhaled for about five minutes, when he became to all appearance intoxicated, but by no means insensible. He was placed on his back upon a mattress, the pelvis fixed with a towel, and the pullies attached to the upper part of the thigh, and the extension, of course, made upwards and outwards, so as to remove the head of the bone from the foramen ovale back to the acetabulum, at the same time inclining the foot inwards across the other leg. Having continued the action of the pullies for about four minutes, the head of the bone returned into its place with a sudden jerk. The patient did not appear to suffer much pain, although great force was gradually exerted for its reduction, and he had the appearance of a person partially tipsy, and continued to talk and laugh throughout the operation. The case is going on well.

Wolverhampton, July 25, 1847.

Hospital Reports.

WEST NORFOLK AND LYNN HOSPITAL.

COMPLICATED SURGICAL INJURIES UNDER THE CARE OF CHARLES COTTON, ESQ., M.D., F.R.C.S.,

(*Continued from page* 129.)

SIMPLE FRACTURE OF THE SKULL, THIGH, AND NECK OF THE SCAPULA; BLEEDING FROM LEFT EAR; CONCUSSION OF THE BRAIN; OTITIS; SUBSEQUENT RE-FRACTURE OF THE THIGH: RECOVERY.

Ferdinend Hess, a sailor, aged 18 years, had fallen from the yard-arm of a Prussian bark, lying in the river, upon the deck, and from thence into the hold of the vessel, October 24th, 1846, noon. He was picked up perfectly insensible, and immediately conveyed to the hospital and visited by Mr. Cotton.—Symptoms: pulse weak; surface pale and cold; breathing slow; pupils somewhat contracted; lies in a senseless comatose condition, but screams loudly, uttering obscene English, (his only acquaintance with the language,) when the injured parts are examined. The face and head are much bruised and injured; the left eyelid ecchymosed and closed; there is a large puffy swelling with depressed centre, above and behind the left ear, about the *occipito-temporal angle of the parietal bone, and free bleeding from the auditory passage;* the left thigh is fractured at its centre; the left shoulder much contused and flattened; the arm elongated and lying loosely by the side; there is marked crepitation and considerable mobility on rotating and raising the limb. Head shaved and cold applied. Liston's straight splint adapted to the thigh; arm placed on a pillow, and fixed by straps to the side.

8 p.m. Has been occasionally shouting and screaming during the afternoon. He is now continually raving and calling out; pulse sharp and frequent. Venesection, carried only to seven ounces, owing to its lowering impression upon the pulse. A scruple of calomel with sugar, placed on the fauces; a drastic enema of jalap, salts, and gruel thrown up the rectum; after which he became more quiet. Allowed only cold water to drink.

October 25th. 5 a.m. Head hot; pulse rapid and fuller; blood still oozes from the ear; talks incoherently; has passed urine freely in the bed. Enema repeated with the addition of turpentine. Calomel and croton oil placed on the tongue.

10, a.m. Much flatus from the bowels, but not otherwise moved; vomited about two hours ago fœtid stercoraceous-like matter, when the raving ceased and a comatose condition supervened.

2 p.m. More conscious; mutters on being roused or disturbed; pulse 120, small and weak; skin warm. As the bowels have not been relieved threw up again a drastic injection.

11 p.m. The enema has acted freely, and the boy is more rational. Pulse less weak; occasionally wanders and attempts to remove the straps which secure his arm.

October 26th. 10 a.m. Is still in a semi-comatose state; bowels moved three times in the night; had slept at intervals, awoke moaning; tongue furred; skin hot; pulse 110, full; the ear discharges a sanguineo-purulent fluid. Give only cold water for diet. Continue the spirit wash to the scalp, and should symptoms of increased irritation or sigus of compression occur, irritate again the rectum.

10 p.m. Bowels freely opened; has been less drowsy, and the muttering has altogether ceased; skin less hot; pulse more compressible.

October 27th. Calm and collected; pulse 90; skin cool; frequent fluid evacuations from the bowels, in which was found an immense *Ascaris lumbricoides;* effusion of scalp disappearing; endeavours to express in his own tongue his desire for food. Let him have a little gruel.

28th. Better; pulse quiet, 86.

29th. The house-surgeon called in the night, found him recovering from a severe convulsive fit; has slept a little since; points to his ear, in which he seems to be suffering much pain; pulse quickened; tongue white and furred, and skin hot; is occasionally dozing and incoherent. Apply eight leeches behind the ear, and hot fomentations assiduously afterwards. Pulv. Calom. cum Jalap. statim.

Vespere.—Dozed heavily during the morning, and did not notice the application of the leeches; pulse 78, on being roused 90; pupils mobile. In case of a recurrence of convulsion, or the pulse becoming slow and labouring, do not hesitate to bleed. A tea-spoonful of fœtid semi-purulent matter escaped whilst examining the auditory passage.

October 30th. No return of convulsion; had slept but little, but remained quiet; some bleeding from the nose, and spitting of bloody mucus from the mouth; pulse 80; skin cool; complains of his shoulder. Permitted to have milk.

31st. Rather restless and delirious during the early part of the night.

November 1st. Rested better; pulse 70, weak; no symptoms of suffering or of cerebral irritation. Let him have bread with his milk.

11, p.m. Much pain in the ear. Apply eight leeches, and afterwards hot fomentations.

2nd. Pain removed; rested well after the application of leeches, &c.; free discharge from the ear; bowels unmoved two days. Solution of sulphate of magnesia with senna.

4th. The draught acted freely; going on well.

6th. Cleanse and foment the ear occasionally, which continues to discharge very offensive sanio-purulent fluid. Allow only milk and bread for diet.

17th. Health good; discharge from the ear has ceased; thigh re-bandaged. Allow, in addition to the milk, some broth and pudding.

December 9th. No headache nor uneasiness; angry and abusive about his diet, and very refractory; refuses to lie still in bed. Let him have middle diet. The swelling of the scalp has entirely disappeared; the depressed portion of bone, about the size of a shilling, *surrounded with callous irregular edges,* is easily detectable by the fingers.

30th. Allowed to get up; the thigh secured by plaster and side splints.

January 10th, 1847. Whilst carelessly walking and larking about the wards, fell and *again fractured the thigh*. Liston's straight splint re-applied.

March 25th. Allowed to get up, but to remain quiet.

April 3rd. Union complete; walks with the assistance of a stick.

11th. Complains of headache and pain in the left ear, which has discharged during the last few days a fœtid purulent fluid. The illuminated speculum shewed three or four myrtleberry-like granulations around the ruptured tympanum and surrounding ulceration. Haust. aper. domest. statim. Apply six leeches behind the ear, and afterwards hot fomentations. Low diet.

13th. Ear discharges freely. Solution of inspissated ox-gall to be dropped in night and morning.

19th. Feels quite well; there remains a slight purulent weeping and deafness of the left ear; walks with but little impediment, and excepting some slight difficulty in raising the arm, and passing the hand behind the head, the injured shoulder has completely regained its strength. Ordered in consultation to be discharged *cured*, as soon as a Prussian vessel enables him to return to his home.

Remarks.—Recovery even after more serious complications is not uncommon; the case, however, is not altogether devoid of interest, inasmuch as it helps to establish the now prevailing practice of not needlessly interfering in the majority of head-injuries.* Although the symptoms did not denote concussion of the worst degree, and the youth of the patient was favourable, the seat of scull fracture, bleeding from the ear, &c., predicated considerable mischief, and, coupled with the damage to the thigh and shoulder, afforded but an unsatisfactory prognosis. The shouting and raving occurring so early after the accident, was looked upon as resulting from irritation of the brain's surface; and the absence of any persistent manifestations of excito-motory, or ganglionic implication, gave hopes that the substance of the brain had sustained no material lesion. Guided by the severity and succession of effects, rather than the nature or extent of the injury, an accurate knowledge of which can rarely be arrived at, *the treatment* was simple:—the head shaven and cold applied; the fractures of the extremities adjusted; a vigilant look-out observed; and a resort to cautious bleeding and other derivative and subdepletory measures, only on the supervention of exalted action and febrile inflammatory disturbance. Returning power and consciousness quickly followed the vomiting; and purgation, and the repeated application of leeches, local warmth, and renewed secretions from the bowels, combined with *hygienic discipline, (minus the globule imposition,)* served to remove the frequently recurring attacks of internal otitis, and possibly to prevent the usual obstinate and troublesome sequences resulting from injuries to the head. A more tiresome, noisy, and refractory fellow the house-surgeon and nurses never witnessed; his violence of temper, disregard of orders, and abusive language, were considerably overlooked, at my request, as I had some misgiving of their being dependent upon perverted function and irritability of brain-fibre, the not uncommon effects of concussion, as well as owing to his inability for a long time to express intelligibly his wants and wishes. He became a favourite before he left the hospital, and acquired a tolerable acquaintance with the English tongue, and was lavish in his expressions of gratitude to those from whom he had received attention. The annoying subsequent fracture of the thigh united soundly without the least shortening or deformity of the limb, and may, with the primary fractures of the extremities, have arrested the attention of the system, and contributed to the boy's recovery.

* Of the propriety of waiting for symptoms, and the toleration of head-injuries in young persons, among several instances under my care, I particularly remember two:—One a child, 5 years old, upon whose head a sea-stone had fallen, tearing extensively the scalp, fracturing through the middle of the whole length of the right parietal bone, and depressing the lower half, which, with the sanction of the late Dr. Wayte, was simply replaced with the elevator. The other a girl, about 8 years old, was struck on the left temple by a windmill sail, and considerably stunned. When brought to the hospital she complained somewhat of headache, and appeared drowsy, and an immense oval indentation of the skull existed at the seat of injury. A cast was taken previously to her leaving the hospital, when the indentation remained as at first, so deep, that the bowl of a large dessert-spoon could easily be received into it. No ill symptoms supervened in either case. Low diet, shaving the head and applying cold, quietude, and attention to the secretions, embraced the whole treatment.

ST. PANCRAS DISPENSARY.

CASES ILLUSTRATIVE OF THE CONDITION OF THE SYSTEM WHICH IS ACCOMPANIED BY OXALIC URINE.

By Edward Ballard, M.D., Lond., Physician to the St. Pancras Royal General Dispensary, and Medical Tutor in University College, London.

(Continued from page 463.)

Case VIII.—Debility.

E. A———, aged 10 years, having never enjoyed absolutely good health, and presenting some of the marks of a scrofulous temperament, was brought to the Dispensary on May 25th, 1846. It appears that five weeks ago she was sent to school, and from that time her health appeared to be declining; she became languid, and lost her appetite, and flesh. Five days ago she was seized with vomiting, accompanied by pain across the navel. Her lips and cheeks are now pale, and she presents several deformities,—namely, lateral curvature of the spine, prominence of the abdomen, a pigeon breast, slight enlargement of the wrists, and the left knee is bent inwards. The mother states that she has lately been subject to profuse night perspirations. She is weak, but the pulse is natural in frequency. She is always now complaining of thirst. The bowels are regular, and she has no vomiting. She was directed to take a nutritious diet, and to be as much as possible in

the air. R. Bebeerinæ Sulphatis, gr. iss.; Sacchari, gr. v. Fiat pulv. ter die sumend.

27th. Is less languid, but very restless at night; sighs very frequently; pulse 106, lying down. Physical examination of the chest gives evidence of nothing morbid. Urine of last twenty-four hours full-coloured, rather cloudy, throwing down a cloud-like deposit, with a little red sand, of specific gravity 1030. The deposit contained an abundance of octohedra, some very large; the sandy matter consists of tables of uric acid.

30th. Appears stronger, and is more lively; the night sweats have ceased; urine contains scarcely a single octohedron in a very slight deposit which occurred, but still about the same quantity of uric acid.

June 1st. Improving; sighs less, and is less restless at night; urine presents a slight deposit as before, but containing more octohedra, and an abundance of uric acid; specific gravity 1035: it contains a slight excess of urea.

4th. Was yesterday very low-spirited, and cried without any assignable cause, appearing to be very languid; is much better to-day; urine of this morning presents a considerable deposit as before, containing an abundance of octohedra and uric acid; specific gravity 1033.

From this time to the 28th of July I saw her about twice a week, and she continued to improve and to gain strength; her thirst entirely disappeared, and she slept quietly at night; the urine varied in quantity from a pint to a pint and a half in twenty-four hours, its specific gravity generally ranged between 1030 and 1036, only one day falling as low as 1017, probably in consequence of a temporary diminution of atmospheric temperature, especially at night. The oxalates continued during all this time very abundant, scarcely varying at all, but the uric acid discharged was remarked to lessen whenever there was a fall in the temperature, even of a single day, and instantly to become more abundant as it rose. The bebeerine was continued for some time with decidedly good results, and on July 17th Ac. Nitrici dil., m. vj., with Inf. Calumbæ, oz. iss., were directed to be taken three times a day. On the 21st the diluted nitric acid was increased to m. viij, and some dumb-bell crystals appeared in her urine.

July 28th. Is more languid than she has been for some time past, which she attributes to having suffered from slight diarrhœa on the 25th; her appetite has fallen off, and she is again as restless as ever at night; urine contains as much oxalate as before. Pergat.

31st. Still complains of languor, and is very restless at night; urine as before. Auge Ac. Nitrici dil. ad. m. xij.

August 4th. Was extremely alarmed at the storm on the 1st, but has appeared better since the air has been so much cooler, and has been less restless at night; appetite is improving; urine pale, of specific gravity 1016, acid, with less abundant deposit, but of the same aspect as before; octohedra fewer and smaller, mixed with them are some circular thin plates, and some fermentation globules.

7th. Gaining strength, and troubled less with languor; appetite very good, and less thirst. The urine during th last two days has been opaque from an excess of lithate of ammonia; urine of last twenty-four hours deosits a light fawn-coloured, pretty dense, sediment, consisting of lithate of ammonia; the octohedra are les numerous; specific gravity 1034.

11th. Has suffered more from languor, and has been more low-spirited since last visit; urine pale, very acid, of specific gravity 1024, and contains fewer and smaller octohedra.

14th. No improvement; does not feel disposed to rie in the mornings; urine of specific gravity 1016, acid, presenting an excess of triple phosphates, and a moderate amount of octohedra, with some fermentation globules.

18th. Much improved in every respect; stronger, and less low-spirited; urine of specific gravity 1021, acid, presents a moderate cloud-like deposit and uric acid crystals as before; the octohedra numerous and mixed with circular thin plates.

21st. Has been more low-spirited, especially on waking in the morning; urine acid, of specific gravity 1015, contains octohedra as before, and only a few crystals of uric acid. Contin. haust. R. Camphoræ, gr ij.; Conf. Rosæ, q. s., pro. pil. cum sing. haust. sumend.

25th. Is in better spirits; urine presents the usual deposit, containing an abundance of octohedra, and a few dumb-bell crystals; specific gravity 1024.

28th. On the 25th and 26th suffered from an attack of vomiting and diarrhœa, which has increased her languor; urine much as on 25th. Omitt. medicamenta.

Sept. 11th. For the last ten days has been residing a short distance from town, and has improved remarkably in strength and cheerfulness. The urine has deposited no red sand; that of the last twenty-four hours presents a tolerably abundant cloud-like deposit, consisting of octohedra, in great abundance, and very large perfectly-formed dumb-bells; specific gravity 1035; considerable excess of urea. R. Acidi Hydrochlor. dil., Acidi Nitrici dil, utrq. m. viij.; Inf. Calumbæ, oz. j. Fiat haust. ter die sumend.

22nd. Only took three doses of the medicine, and then omitted it, on account of its producing vomiting; improving in every repect. Urine has again contained red sand, but there is none in that passed during the last twenty-four hours; it contains, however, an abundance of octohedra, and a few of the circular thin plates, but no dumb-bells. Omitt. medic.

29th. Gaining flesh and strength; urine presents an abundant cloud at the bottom; specific gravity, 1026. The deposit contains much fewer octohedra than before, but an abundance of dumb-bells in all stages of development, from an oval plate with a darker point in the centre, to the perfect form, along with circular thin plates of all sizes.

Oct. 8th. Improving in every respect; urine has contained no red sand, that of last twenty-four hours contains an abundance of large octohedra, and a few of the circular thin plates, but no dumb-bells.

22nd. Is quite well; has improved in flesh, and her spirits are excellent; urine contains very few octohedra, and no dumb-bells nor other saline deposit. Discharged.

Remarks.—The history of a naturally weak child exposed, during a summer remarkable for its continued high temperature, to the confinement and close atmosphere of a crowded school-room, and from that time to the cool weather of autumn, labouring under symptoms of marked debility, requires no comment. All that devolves upon me is to point out the connection between this state, and the condition of the urine for the sake of which it is reported. During five months oxalate of lime was uninterruptedly discharged by the kidney; it assumed at various times the octohedra, dumb-bell, and circular* form, and varied in quantity with circumstances which it shall be my business to notice:—1st. Five months is the longest period during which I have watched oxalates uninterruptedly discharged with the urine, and probably in this instance they continued in it for some time after the patient ceased to be under my notice. 2nd. We have an example here of all three forms of oxalate of lime occurring in a single subject, and their study accordingly may not be uninstructive. As respects their relative abundance, then it will be observed that the frequency with which octohedra occurred was much greater than with the other two forms; and this is ordinarily the case. Out of nineteen individuals, whose cases I have analysed, there was only one in which they were absent; and out of 139 specimens of oxalic urine, they were present in all but three. In the present instance again the dumb-bell and circular forms each occurred five times in thirty-two specimens examined. This, however, does not represent the relative frequency of these forms, since, out of 139 specimens of oxalic urine, I have met with dumb-bells six times, but with the circular form, ten; and out of the nineteen individuals mentioned, I have met with dumb-bells but in two, while the circular form occurred in six. In one individual I have seen the circular plates as the only manifestation of the oxalic tendency, during the time he was under observation; but dumb-bells have, in my experience, never presented themselves without being accompanied, preceded, or followed by octohedra. The circular form again I have noticed to occur alone in three out of the ten examples of it; and in only one of the remaining seven were dumb-bells conjoined; and although I am satisfied, from unrecorded observation, that dumb-bells also may occur without octohedra, yet, in the six specimens alluded to above, they were accompanied by them. These two remarkable forms appear to be not very distantly allied. 3rd. As case IV. illustrated the lowest, so this illustrates the highest, specific gravity that I have noticed, in connection with oxalate of lime,—namely, 1036. The specific gravity of the greatest number of specimens I have examined ranged between 1014 and 1031, the average between these numbers being 1022. Out of 127 specimens, 14 were below specific gravity 1014, and 8 only above 1031. I have also remarked with other observers, that when oxalate of lime was in progress of being discharged, a diminution of it commonly took place whenever the specific gravity was remarkably lowered. One word more upon this head: the circular form appears connected with a specific gravity rather lower than the average. In the three instances where it occurred alone, the specific gravity was 1011, 1015, and 1019; when with octohedra, 1010, 1016, 1020, 1021, 1022, 1023; but when with dumb-bells also, 1026. I have met with dumb-bells in urine as low as specific gravity, 1012, and as high as 1035. 4th. It has been stated that the appearance of uric acid not uncommonly precedes the disappearance of the oxalates. It occurred in seven out of the nineteen individuals mentioned, but in none could I perceive any relation of the kind. The sudden discharge of a large quantity of lithate of ammonia, however, has appeared occasionally to influence in a temporary manner the subsequent amount of oxalates. 5th. In connection with this case I may observe, that in several instances where the specific gravity has been rather low, I have noticed the occurrence of confervæ in oxalic urine, the presence of sugar not being indicated by the application of Trommer's test.

* The term *circular* is not to be applied too strictly, as the plates assume commonly more or less of the oval shape.

CASE IX.—DEBILITY: ECZEMA.

M. C., aged four years and a half, of tolerably healthy parentage, has generally enjoyed very good health, with the exception of suffering occasionally from febrile disturbance for a few days, accompanied by constipated bowels. She was brought to the Dispensary on the 2nd of September, 1846. It appears that three years ago she began to lose flesh and strength, and two months ago suffered from one of her customary attacks of feverishness, during which her debility increased, and since which she has remained pale and very languid. About a fortnight ago a few pimples were noticed on the scalp, which have now formed crusts over a limited space upon the vertex, presenting the characteristic aspect of eczema. Her appetite is defective, she can rarely be induced to eat any meat, and her bowels are disposed to be constipated. Abrad. capillities.

4th. No improvement; urine of last 24 hours cloudy, and presenting a cloud-like deposit, consisting of phosphates, specific gravity, 1016. The scalp to be covered with an oiled-silk cap. Omni mane Ol. Ricini, dr. j.

7th. The eruption has spread extensively over the vertex, and there is an appearance of the disease affecting the corner of the mouth. She appears less languid; bowels have been purged; urine 1030, acid, presenting a deposit of lithate of ammonia. Contin. Ol. Ricini. Water dressing to scalp.

10th. Eruption extended over the scalp; complained of a little headache yesterday. Bowels not so much purged; urine presents a moderate cloudy deposit containing an abundance of octohedra, mixed with prisms of triple phosphate. To continue the water-dressing and castor oil. Ter die capt. Hydrarg. cum Creta, gr. iv.

14th. Eruption improved in appearance and more limited in extent; bowels open once daily; urine of the last twenty-four hours half-a-pint, with an ammoniacal odour, alkaline re-action, of specific gravity 1015, presenting a whitish cloudy deposit which contains a

considerable number of phosphatic prisms and a few moderate-sized octohedra.

17th. Improving; eruption discharging less and becoming more limited; says that the castor oil causes her to feel sick all day; urine contains no oxalate. Omitt. Ol. Ricini. R. Hydrarg. cum Creta, gr. ij.; Pulv. Rhei, gr. iij. Fiat pulv. nocte maneque sumend.

21st. Eruption now confined to the vertex and line of coronal suture. Is less languid and rises cheerfully in the mornings. Bowels regular; urine alkaline, of specific gravity 1021, depositing a cloudy sediment, containing some phosphatic prisms, but no oxalate.

24th. Has no languor now, but appears stronger; appetite improved; eruption confined to the vertex and left side of the coronal suture; urine of specific gravity 1026, alkaline, presenting a very cloudy deposit, which contains much phosphate of lime and phoshatic prisms, and a large number of octohedra, some, however, being very small. Capt. pulv. omni nocte tantum.

29th. Crusts falling from all the affected surface; solitary sero-purulent vesicles here and there upon the neck; colour of lips and cheeks improved, and she is gaining strength. Urine of specific gravity 1025, alkaline, deposit as before.

October 2nd. No eruption now, and only a very few crusts not yet fallen from the part first affected; continues to gain flesh, strength, and colour; urine of specific gravity 1026, alkaline, deposit as before, but containing few and smaller octohedra. Omitt. pulv.

6th. Improving in every respect; urine of specific gravity 1019, faintly acid, deposit slight, and containing phosphates as before, but scarcely any octohedra.

12th. Continues to improve; a few solitary vesicles appear occasionally at the back of the neck; urine of specific gravity 1022, moderately acid, presenting a moderate cloud-like deposit containing a large number of octohedra of all sizes, but only a few phosphatic prisms.

16th. Is in every respect well; urine contains no octohedra, specific gravity 1023.

20th. The eruption having quite disappeared, has left the hair rather thinner over the affected parts, but there are no bald patches; urine of specific gravity 1021, acid, presenting a cloud-like deposit containing a very few octohedra. Discharged.

Remarks.—This is the youngest patient in whose urine I have remarked the deposition of oxalate of lime, the oldest was 72 years of age. Although connected with the debility, which accompanied the local disease, it plainly fluctuated with the progress of the latter, the quantity of oxalates becoming increased whenever the formation of new vesicles was proceeding, and lessening or disappearing altogether as they died away or were converted into crusts. This condition of the urine is only occasional in the course of eczema. Alkalinity is shown by this instance not to be incompatible with the presence of an oxalic deposit; but still it is not a common state of the urine, as I have only met with it on one other occasion. The deposit of phosphates was observed fifteen times out of 137 specimens of oxalic urine.

Since the above is the last case, which I intend reporting to illustrate the oxalic diathesis, it may not be amiss to conclude it by an enumeration of the several morbid states which I have seen it accompany. They are the following:—Hypochondriasis; delirium tremens; a disposition to this disease or mental derangement from intemperance; mania; melancholia; mercurial tremor; cerebral hæmorrhage; hysteria; spermatorrhœa; debility and cachexia connected with a scrofulous constitution; eczema; acne; gastrodynia; acute, gonorrhœal and chronic rheumatism; Bright's disease of the kidney, (shortly before the comatose stage;) cancer of the liver; cancer of the lung; cancer of the uterus and bladder; irritability of the bladder; enlarged prostate; hypertrophy, with valvular disease of the heart; and aneurism of the aorta. Its occurrence with granular kidneys and albuminuria is remarkable for its extreme rarity. In some persons of unhealthy parentage and scrofulous taint, I am disposed to believe that the secretion of oxalate of lime with the urine may become habitual, since I have noticed it continue in such a person for some months independently of the presence of any active disease, and unaffected by change of air, modifications of diet, or tonic medicine. So for as my own observations have been carried, the sexes appear to share equally in the diathesis.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, SEPTEMBER 8, 1847.

It may not possibly at first sight appear that the subject of emigration materially concerns the medical profession. A consideration of recent events—events arising out of the famine which has so awfully ravaged many parts of Scotland and Ireland—however, but too clearly shews that the *immigration* of destitute persons exercises a most disastrous influence on the health of the population of those districts to which they fly for refuge, and in the sanitary questions which arise out of such a state the medical practitioner is greatly interested. The prevalence of a fatal form of fever amongst the Irish immigrants into Liverpool, Bristol, Glasgow, and other towns on the Western coast of Great Britain, and the rapid spread of the same disease through the general population, not only in the sea-port towns, but in the towns in immediate or frequent intercourse with them, and in the surrounding villages, are among the well-known effects. The sacrifice of life among the members of the medical profession, and others whose duties lead them into intimate connection with the sick, is an afflicting truth, which admits not of question, and the clear evidence of infection which has attended this epidemic famine-fever, is such as to call for the best-directed efforts to provide by judicious

sanatory regulations against similar contingencies for the future.

It can scarcely be questioned, we think, even by the most pertinacious anti-contagionist, that the fever which has carried off so many among the population of Liverpool, Manchester, Leeds, and other populous towns in the northern districts, was introduced by the immigration from Ireland, was decidedly contagious or infectious in its nature, and was of pecular malignancy even in healthy persons, when directly exposed to its primary infection. The ferment of the famine-fever, (if the expression may be allowed,) whatever its true nature may be, like that of other transmissible diseases, (the vaccine for instance,) seems to have acted with greatest effect in its primary or earlier transmissions through the system of healthy individuals, and the whole of the phenomena attending it, as it seems to us, clearly point out that a well-devised system of precautionary measures, with early separation and isolation of the sick from the healthy populatiou, might have put a stop to the ravages of the disease, at least among those who were not themselves, by previous privations and suffering, strongly predisposed to it. Many valuable lives might thus have been preserved, and very many others spared the risk attendant upon exposure. That a very large proportion of those who had previously suffered from destitution and famine must unavoidably have become the subjects of the fever, is evident, not only from what has occurred in Ireland, and in this country, but elsewhere, but the permitting of large numbers of a population, thus carrying, with them and in them, the seeds of malignant infectious disease, to throw themselves, indiscriminately and without restraint, into the heart of densely populated towns and districts, was surely sowing to a fatal harvest of disease and death, the effects of which cannot but be felt for years to come. Such an event ought to have been foreseen and provided against in time; and the expense of constructing a few temporary hospitals, or places of refuge, for the sick and destitute, whom want and suffering of every kind had thus driven on our shores, would have been amply repaid, and in the end, indeed a measure of pure economy. The expense too, might have been borne, in part at least, by the country at large, and the local districts have been relieved of what, upon some classes of the inhabitants, has proved a most serious burden, and aggravation of the calamity.

It is not yet too late to profit by the sad experience which we have attained, if not in our own case certainly in the case of some of our colonies. From the accounts received from Canada, we learn that the same fatal scenes are being enacted in that country, as of late we have witnessed here. The emigrants who have fled from the famine and the fever desolating their own country, have carried with them there also, the effects of both, and the mortality amongst them is fearful. Of nearly eighty thousand passengers to Canada, the mortality is estimated to have reached to one-eighth of the whole number, and at the Marine Hospital, at Quebec, and the adjacent sheds, which have been appropriated to the reception of the emigrants suffering under fever, the deaths out of a thousand patients are reported to amount to one hundred per week. As yet, the fever, though spread through the country, wherever the emigrants have have proceeded, has been chiefly confined to them, but there is too much reason to fear that unless some measures, more efficient than those hitherto adopted, are had recourse to, it will here also extend its ravages to the general population.

But it will be asked, what are the measures which should be adopted to prevent the extension of this fever to the healthy, and extinguish it in the diseased? Precisely the same as experience has shewn to prove successful in other cases of contagious diseases;—separation of the sick from the healthy—isolation of the sick themselves, by avoiding over-crowding in the hospitals and buildings appropriated to their reception—and the attempt at least to remedy the condition of those predisposed by previous destitution, by supplying them with good food, by enforcing cleanliness, and generally by affording to them such comforts of clothing, &c., as their condition requires. It may be, that to carry out these objects, would demand a considerable amount of expenditure, but we are well assured that such expenditure in the first instance is the truest saving in the end, and most thankful should we be, that whatever were the threatening aspects with which the present year commenced, the abundance which now promises, places much in our power towards the supply of a sufficiency of nourishment to all. We shall conclude these remarks by quoting from the Quarterly Return of the Registrar-General, the account given of this fever by Mr. Leigh, of Deansgate.

"The fever," he observes, "is of an exceedingly low type, the subjects of it becoming typhoid, with a dry brown tongue, within a very few hours after the attack. In many, the brain is oppressed from the beginning, the pulse continuing slow (ranging from 70 to 80,) throughout, the pupil being large; whilst in some there is great abdominal irritation, vomiting and diarrhœa ushering in the attack. This is followed by great tenderness over the

abdomen, intolerance of pressure, and considerable distension from flatus. So far as my own observation has extended, and as far as I can gather from my professional friends, I think it may be stated generally that the mildest treatment has been the most successful. The present epidemic is essentially a famine fever, imported into this country by a class reduced to the lowest condition consistent with the carrying on of the vital processes. In such a state of the system, general derangement takes place, the body lives upon itself, furnishes its own materials for respiration, abnormal products are formed, partly retained and partly eliminated, producing disease in the system which forms them, and communicating it by the eliminated matters to others. Want compels the destitute to live together, whilst the deficiency of water, and the great personal uncleanliness of the Irish poor, gives to their sordid skin a morbid coating, and the tainted air they breathe carries its poison abroad, and the well-fed and the wealthy fall victims to the famine they felt not. A better supply of good food, a greater abundance, more water, the separation of the poor from each other by removing them from the low lodging houses in which they congregate, often to the number of eighteen or twenty in a single room, and the inculcation of *greater cleanliness by the priesthood of all denominations*, will, better than all mere medical treatment, subdue the fever which is now sweeping so many to the grave."

Proceedings of Societies.

BATH AND BRISTOL BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ANNUAL MEETING.

The Sixth Anniversary of the Bath and Bristol Branch of the Provincial Medical and Surgical Association was held at the Medical Library, Bristol, July 22nd, 1846.

Among those present, were Mr. Ormond, Mr. Cox, Dr. Cardew, Dr. Edwards, Dr. Wheelwright, Dr. Daniell, Mr. Bartrum, Mr. Norman, Mr. John Barrett, Mr. C. Edwards, Mr. T. Barrett, Mr. King, and Mr. John Soden, Bath; Mr. Vicary, Warminster; Mr. Crang, Timsbury; Mr. Fowler, Chilcompton; Mr. Washbourne, Corsham; Mr. Barrow, Dr. Kaye, Dr. Budd, Dr. Trotman, Dr. Symonds, Mr. Prichard, Mr. Surrage, Mr. Ruddock, Mr. Morgan, Mr. Coe, Dr. G. Fripp, Mr. Green, Mr. Colthurst, Mr. Mayor, Mr. Godfrey, Mr. Neild, Mr. Clark, Mr. Hetling, and Dr. Ogilvie, Bristol.

Mr. Ormond, the retiring President of the Branch, having taken the chair, expressed briefly the pleasure and gratification he had experienced during his year of office, and returned his thanks to the members for their kindness to him on all occasions. In the absence of their President, Mr. Nathaniel Smith, who was suddenly obliged to go to London, he had been requested to continue in the chair.

The Secretary read the report of the Council.

Mr. Flower, of Chilcompton, was unanimously appointed President-elect.

Some ordinary business was then transacted.

COMMUNICATIONS.

Dr. Edwards, of Bath, read a paper "On Ulceration of the Cervix and Os Uteri, and its occasional Cause of Dysmenorrhœa. [This paper will be found in the present number of the Journal.]

Mr. Prichard read the account of a case of cataract, which had come on in infancy, and which was cured by operation when the patient was twenty-seven years of age. In this case the phenomena attending the process of learning to see and to compare the results obtained by the sense of touch with those obtained by vision were very well marked.

Dr. Daniell read a "Case of Disease simulating Canine Rabies."

Mr. T. Barrett, read a "Case of Obstruction to Labour, from Rigidity of the Neck of the Uterus, successfully treated by Incisions."

Mr. Clark read a paper "On the Power of Elasticity in Mechanical Surgery." He first alluded to the great influence of the elastic principle in the human economy, and then stated that this essential property in the living animal tissues could be simulated. Vulcanized caoutchouc was the medium he proposed. It had frequently been used as a compressor. As a tractor it had rarely been employed, though in his opinion it would in many instances prove more efficient than the screw or the rack. He stated many cases in illustration, as, the withdrawal of dead bone, removal of ligatures, lateral spine curvature, rigid joints.

BIRMINGHAM PATHOLOGICAL SOCIETY.

April 3rd, 1847, JOHN ARCHER, Esq., in the Chair.

SCIRRHOUS PYLORUS.

Dr. Fletcher brought forward a specimen of carcinomatous stricture of the pylorus, which had been taken from the body of a man aged 65, who had become a patient at the General Dispensary a short time previous to his death. When admitted he was labouring under marked symptoms of the disease, which had originated some months previously. There was a tumour in the region of the pylorus, and the region of the stomach was very much distended and tympanitic. At the *post-mortem* examination the stomach was found very much dilated, and a carcinomatous tumour compressing the pylorus, of the size of a small orange. All the other organs were healthy.

RETROVERSIO UTERI: SUPPURATION OF THE KIDNEY.

Mr. Francis Elkington exhibited the kidneys, and bladder, and the uterus and its appendages, of a woman who had suffered from retroversio uteri, followed by suppuration in the right kidney, of which the following is the history:—

Mary David, aged 28, of a fair complexion and sanguineous temperament, was admitted a patient of

the Lying-in Hospital, February 2nd, 1847. She has had three children. Her last labour, which was eighteen months ago, was severe, after which she suffered from prolapsus uteri. She was a patient of the Lying-in Hospital last summer, and was then suffering from prolapsus uteri and general debility. She states, that she menstruated freely the last week in September, (1846,) and very slightly so the first day in October. From the first week in October she thought that she was pregnant. Her appetite became unusually great, which was one of the earliest symptoms in her former pregnancies. She had longings, sickness, &c. Her bosom, which was very small before this time, increased in size, became firmer, and was at times painful.

On January 2nd, after washing her house, the uterus was prolapsed as usual, and on pushing it up she felt as if she had pushed up a lump of ice. The day was very cold. She felt unwell the rest of the day, and cold and shivering. On Sunday, January 3rd, about three o'clock, a.m., she had a severe rigor, followed by strong bearing-down pains, as if she were in labour, but the uterus did not come down, nor has it been prolapsed since. She had frequent and painful desire to make water, but was not able to pass any till night, nearly twenty hours, and then but a very small quantity, and after she had had her bowels fomented. She continued much the same the following day, (Monday,) and passed only a few drops at a time. On Tuesday a surgeon was called in, who passed the catheter, and relieved her. It was not passed again till Saturday, after an interval of *three days*; during the whole of this time she was in great agony, and not able to make water. A small quantity "dribbled from her" at times after the fomentation. She says her belly was as *large* as a *man's hat*, and shined like a looking-glass. She continued about the same till February 2nd, suffering most severely from straining and bearing-down pain in the back, belly, and hips; she *was not* able to pass her water the whole time, and *frequently went two and three days* without having it drawn off. The surgeon who attended her said that she was suffering from a tumour, and that nothing could be done for her.

On Tuesday, February 2nd, there was a large discharge of pus, after which she was able to pass a little water. When the first discharge of matter took place, she thought it was water, and exclaimed to her husband, "Oh! how very easy my water is coming." She now complains of frequent pain and *constant* uneasiness; weight in the pelvis, and a disposition to bear down. She has frequent sickness; vomiting; a furred tongue; pulse 100, and feeble; bowels confined, swollen, and distended with flatus; the abdomen is slightly tympanitic. She passes her water very frequently, but only in small quantities, and mixed with matter. There is no distinct abdominal tumour, but slight enlargement to be felt behind the pubes; pressure in that situation gives pain; the breasts are full and glandular, areola in each well marked, sebaceous follicles enlarged, and the surface of each breast traversed by numerous distended veins. *Examination per vaginam*:—The vagina is occupied by a large globular-shaped tumour. The vagina, posteriorly, and on either side, terminates in a *cul de sac*; the os uteri cannot be felt. On passing the finger anteriorly, it passes between the pubes and the fore part of the tumour readily to some distance, but barely and with difficulty touched the os uteri, which was situated above the pubes, and pressing against the bladder. The opinion given was that she was pregnant, and suffering from retroversio uteri. Ordered to have the catheter passed *three* times a day, and to observe the recumbent position constantly. To take ten grains of Dover's powder every night. R. Magn. Sulph., dr. vi.; Infus. Rosæ, oz. viii. M. Sum. oz. iss., ter die.

Feb. 6th. About the same; she is relieved by the catheter; the secretion of urine is rather scanty; a quantity of pus follows the flow of urine every time the catheter is passed.

9th. She is not quite so well; the catheter has not been so regularly used; she has frequent sickness, and frequent attacks of pain about the bladder and in the back; bowels have been relaxed; pulse feeble; her general aspect rather worse. Examination per vaginam:—The uterus is still in the same position; on pressure it feels doughy, and is painful, particularly towards the anterior part. Examination per rectum:—The fundus of the uterus presses considerably in that direction; after passing the catheter, I tried by pressure, directed to the fundus uteri, to rectify the position of the uterus, but could not succeed; I then placed the woman upon her elbows and knees, passed the finger of the right hand to the os uteri, and whilst making an effort to draw that down, I endeavoured, with the finger of the left hand passed into the rectum, to press up the fundus, but this attempt also failed; and as it gave her great pain, I did not think it right to try it again. The uterus appeared moveable, but I could not rectify its position without introducing my hand into the vagina, and therefore thought it better to wait a few days in hopes that she might quicken, and the uterus right itself. She was ordered an effervescing mixture, with carbonate of ammonia and lemon juice, and an opiate at night. The use of the catheter to be continued.

10th. She vomited last night after her pills, and passed a bad night; suffered much pain. The catheter was passed, and half-a-pint of urine drawn off, which was followed by a quantity of pus-like stuff. She has a constant vaginal discharge. Each time the catheter is passed, the latter portion of the urine drawn off, which is mixed with pus, is also accompanied with a mortar-like deposit. Pulse feeble. Ordered prussic acid mixture and morphia at night.

11th. The poor woman, continuing very ill, and being badly attended to at home, was this day admitted into the hospital. The fatigue of riding to the hospital, although the distance was short, very much overpowered her, and she does not appear so well. She has not been sick since taking the last medicine.

12th. *Vespere.*—She is better, much easier; pulse 100; no return of vomiting; there is less tenderness about the epigastrium; she complains of headache, and attributes it to the pill she took last night; she has passed her water two or three times a day without the

aid of the catheter. I passed the catheter and drew off six or eight ounces of urine, mixed with pus. On making an examination per vaginam, I found that the uterus had nearly righted itself. The os, which before could scarcely be felt above the pubes, is now low down, and directed towards the axis of the outlet. Ordered to continue the prussic acid mixture, and to omit the pill at bed-time.

13th. She has passed a bad night; has slept very little; been purged twice; made water freely, and for the first time since her illness, whilst sitting up; complains *much* of *heart-burn* and sickness; has vomited freely this morning; pulse 120; tongue nearly clean but reddish; she has less pain, but complains of feeling very weak. On making an examination per vaginam the uterus was found still low down, but the os directed towards the sacrum and nearly out of reach. R. Sodæ Sub-Carb. dr. iss; Acid. Hydrocyan. dil, m. xxx.; Aquæ, oz. viij M. Capt. oz j. quartis horis. R. Hydrarg. cum Creta, gr. viij.; Extr. Hyoscyami, gr. v. M. Fiat pil. ij., hora somni sumend.

15th. Not so well; she has had an attack of diarrhœa and vomiting; passes water freely and without difficulty. Ordered Mist. Creta cum Opio.

16th. Better.—18th. Better.

19th. She has quickened; bowels confined; she passes her water freely, but has great pain just as she has finished; still passes pus with the urine or after it.

20th. Has been purged six times, and feels very low. Pulse 110; tongue red; urinates freely; the purulent discharge continues; cheeks flushed, and she has a hectic appearance; the face appears shrunk; the uterus has risen higher. Examination per vaginam :—The os is in the right position; there is a soft swelling, or great fulness, between the uterus and pubes, and distinct from the uterus; the swollen part is very tender to the touch. Ordered to take an opiate at night, and the following mixture :—R. Liq. Potassæ, Tinct. Hyosc., utrq, dr. ij.; Infus. Calumbæ, oz. vss. M. Sum. oz. j., ter die. To be allowed a mutton chop and a little beer.

21st. Passed a better night; bowels not moved since last evening; she has been much distressed with sickness and heart-burn, and great thirst. Examination per vaginam :—There is still great fulness anteriorly; the catheter was passed and half-a-pint of very fœtid urine, mixed with pus, drawn off. Ordered to take simple effervescing mixture at any time; the anodyne pill at night.

22nd. Has passed a much better night, has had less sickness and heart-burn, and less thirst; bowels not moved since yesterday; she passes her water freely, but complains of pain at last, or just as she finishes; the water is still mixed with pus; she complains of pain in the right side, in the situation of the kidney; there is also tenderness on pressure; pulse 120; she is less flushed. Passing the catheter last night gave her great pain. Mr. Hailey says there was some injury done to the urethra in the early part of her illness, and that there has been a small slough discharged from it to-day, and that there is a small opening in the urethra, into which the point of the catheter passes, if care be not used. Contin. mist. effervesc. and anodyne; hot salt to be applied to the side. In the evening I received a message that she was worse; the pain in her side was very acute; vomiting frequent. Ordered Empl. Lyttæ amplum. Tinct. Opii, m. xxx. statim, et rept. pro re nata.

23rd. Not so well; has had constant vomiting; passed a very restless night, but had three or four hours sleep; the blister relieved the pain in the side; bowels not moved since yesterday; pulse 120, very feeble; altogether, her appearance is worse. Ordered Acid. Hydrocy. dil. in Mist. Camph. secunda quaque hora.

Vespere.—Pulse 130, and weak; sickness continues; she has not passed any urine, but says every time she vomits or coughs the urine is forced from her; just within the meatus urinarius there is a fungoid growth, the size of a large bean. In passing the catheter it enters the urethra readily, but when it has traversed three-fourths of it, it meets with some obstruction, which requires the handle to be depressed, and some manœuvring to get it into the bladder; on passing the finger into the vagina, along the course of the urethra, the point of the catheter was found to be arrested by the vaginal tumour, which presses against the neck of the bladder; there was no urine in the bladder, but it was found that a large quantity of pus had escaped by the side of the catheter into the bed. To continue the hydrocyanic mixture. To take Tinct. Opii, m. x., hora somni; Vin. Rubr., oz. j., quarta quaq. hora. She expressed a wish to take an egg, which was allowed her. The os uteri is in its natural position.

24th. She slept two hours only, but was more comfortable and passed the whole night without vomiting. The sickness returned this morning and distresses her very much; bowels costive; pulse 120 and very feeble. She complains of the vomiting hurting her eyes very much; every time she vomits there is a gush of matter from the urethra. Ordered an aperient enema. Contin. Mistura cum Acid. Hydrocy. dil. m. v. in each dose. To continue the port wine and to have a sinapism applied to the epigastrium.

25th. Sickness very distressing; bowels not moved; pulse 120, and very feeble; can keep nothing on her stomach but the wine. Ordered the enema to be repeated every four hours till the bowels have been moved, and the anodyne at bed-time.

26th. Worse; pulse 130; vomits frequently; bowels not moved; urinates easily, but passes a large quantity of pus with the urine, it also gushes from her each time she vomits; she slept very little in the night; has had no pain in the side since the blister. To continue the wine, and to have a small blister to the epigastrium. A purging enema every four hours. To take Magn. Sulph., dr. ss.; Magn. Carb., gr. v., in water every three or four hours. She is much troubled with heart-burn; altogether her state is a very bad one, nearly hopeless.

27th. She is better; has not vomited since yesterday; pulse 120, with rather more volume in it; bowels moved three times; blisters acted well; urine less purulent; she has taken a little calves-foot broth several times, which has remained on her stomach. To

discontinue the medicine, as she has a great aversion to it.

28th. Something better; she was very anxious to take some tea, after which she vomited once or twice; bowels moved twice; urine much improved. To keep to the broth, but as she is constantly begging for change of diet, to have the yolk of an egg beat up with water, and two drachms of brandy. Not to take any medicine. an aperient injection. To be allowed a little bitter beer.

March 1st. About the same; bowels not moved; has had a return of the sickness; pulse 120; urine less purulent; she has less pain, but still has some pain after making water; she is frequently wanting a change of diet, and soon tires of every thing. Ordered

2nd. Not so well; pulse 128, and rather weak; cheeks more flushed; vomiting more frequent. Yesterday she was constantly craving for roast pork and sage which she had smelt whilst it was roasting; the nurse indulged her with a little; since she took it she has vomited everything she has taken; the urine is not so clear, there is more pus with it, and it smells worse; there has also been some discharge again when she has vomited; she is constantly troubled with thirst and heart-burn; tongue red; she complains of pains in her back, like labour-pains, and cannot lie on either side for more than a few minutes; she is easiest when she lies upon her back with her knees drawn up. Ordered mutton broth injections twice a day; to take barley water, which is the only thing that will remain any time on her stomach, and a little broth. To abstain from every thing else until the sickness is better. Empl. Belladonnæ over the epigastrium. To take Liq. Potassæ, m. xx., ex Infus. Humuli tertia quaq. hora.

3rd. Has passed a restless night and had very little sleep; she complains much of weakness; pulse 130; she has not been sick since yesterday; has not taken anything but barley water and the mixture, which she thinks agrees with her. She says, in her former pregnancies she has never been a single day free from sickness, from the very commencement until the day of her confinement. Bowels moved once; urine rather clearer; the uterine pains are less, and she can now lie on either side for a short time; she has a great desire for food. To continue the mixture and barley water. To take Extr. Hyoscyami, gr. iv.; Morphiæ Hydrochlor., gr. $\frac{1}{3}$., hora somni.

4th. Worse; passed a bad night; is constantly sick, and vomits after everything she takes; pulse 130, very feeble. She has passed very little urine to-day; it mostly comes away when she vomits; she thinks the bitter mixture does her good. Continue mixture and broth injections. To have a little boiled mutton.

5th. She is rather better; has had less vomiting; urine more purulent; she is a little yellow, and bowels costive. Ordered Pil. Hydrarg., gr. iv., hora somni; and continue mixture.

6th. Worse; vomiting returned; very weak. To take the following:—R. Quinin. Disulph., gr. xij.; Acid. Sulph. dil., m. xxx.; Tinct. Aurant., oz. ss.; Aquæ, oz. vss. M. Sum. unciam quarta quaq. hora. Haust. Magnes. c. Rheo statim sumend.

7th. A little better; bowels moved twice, evacuations pale; vomiting stopped; she looks jaundiced; she complains of uterine pains. Rept. Pil. Hydrarg., hora somni, et mistura.

8th. About the same; the uterine pains increased during the day, and at night she was delivered of a five months' child.

9th. She is very weak; pulse quick and feeble; she has not had much lochial discharge; is still sick, and has vomited two or three times to-day; urine scanty and purulent. Ordered Sp. Ammon. Arom., dr. j., e cyatho Aquæ, quarta quaq. hora. Vin. Rubr., oz. j., quartis horis.

10th. Something better, but very weak; pulse very feeble. She has not been so sick, and has kept down the wine and water,—also a little beef tea, or gruel. She has had more lochial discharge, and has expelled a few small clots, after which she seemed more prostrated.

11th. Worse; vomiting has returned; she appears to be sinking. She complains of great pain about the lower part of the belly, and tenderness on pressure. Ordered warm applications, and Tinct. Opio, m. xl. statim. She died in the evening.

Autopsy, eighteen hours after death.—Slight sugillation about the nates only; skin dark, congested, and cracked on right hip; rigidity scarcely perceptible; abdomen sunk; fundus of uterus perceptible externally.

The abdomen exposed by a mesial incision; no trace of inflammation about peritoneal surface in any part; no agglutination—every where it was clear, shining, and healthy; intestines of a dark, dirty greenish colour, especially those in the vicinity of the gall-bladder, which were deeply tinged; they were small, contracted. The uterus filled the pelvic cavity, its fundus rising a little above the brim; bladder small, contracted, and empty, and in its natural position behind the pubes, like a solid flattened body; the finger passed down between it and the uterus to the neck of both, also the cul de sac between the uterus and the rectum was of a most unusual depth, terminating very low behind the vagina. On the anterior part of the cul de sac, near the bottom, was an irregular, black, carbonaceous spot. On the anterior surface of the uterus was a large circular pale patch, about two inches and a half in diameter. The uterus could be easily turned backwards, retroverted, and passed into the cul de sac, throwing this circular spot upwards. The appearance of the tissues before removal was natural; the peritoneum in each cul de sac about the neck of the uterus had a spotted greyish appearance. The pelvic contents were removed together, including the rectum and vulva. On cutting across the right ureter, a thin, dirty yellowish pus, escaped; the ureter was much dilated; the left kidney was removed with the ureter entire. It is to be regretted that the right was not thus removed, as in it was the chief seat of mischief.

Bladder.—An elliptical piece was cut out of the fundus; the urethra slit up anteriorly; the nipple at meatus prominent; urethra about an inch and a half, surface natural in colour to the neck, where it became altered. Along the mesial line posteriorly the mucous membrane appeared slit, and gradually to separate until reaching

the neck, where an aperture was formed under an arch of ploughed-up membrane, a quarter of an inch deep, stretched across. This had been evidently done by the catheter, though not very recently, as the edges were in close union with their subjacent parts, and covered by epithelium. The mucous lining of the bladder throughout, but especially posteriorly, was of a punctiform and maculated blackish grey; (these spots on the following day, when exposed to the atmosphere by the incision, had become red;) the membrane sound not corrugated; the parietes thick and firm.

Kidneys.—Left healthy; ureter somewhat enlarged and thickened in its upper part; right ureter throughout enlarged, gradually increasing upwards, also thickened; pervious to the bladder to water, not to probe, it contained the thin matter already noticed; the pelvis of the kidney was not much dilated; the true covering of the kidney was thick, and the surrounding cellular tissue unduly adherent and condensed. On section, a large quantity of thin, greenish yellow, purulent matter escaped from many cavities. The whole kidney was disorganized, and consisted almost of a series of dilated cysts, (the calices,) communicating with the pelvis. The upper end only had a sound portion. The surface of the cavities was greenish, dirty, soft, gelatinous, rotten.

Uterus.—Fallopian tubes, ovaries, and broad ligaments congested, soft, and rotten; a small cyst hung from the left Fallopian by a pedicle of two inches. Both ovaries, especially the right, were completely disorganized—a mere pulpy mass. In the broad ligament near and about the left ovary were some yellowish spots and streaks, from which, on puncture, pus escaped. The uterus was about six inches long, and four and a half across; its parietes about the fundus thick. It contained a clot hanging from the seat of the placenta; no portion of placenta in connection with it. The lining membrane was soft, dark, congested, and about the neck, brownish, rotten, almost sloughy; and posteriorly were three or four little, round, hard, elevated bodies, the size of hemp seed. On puncture a clear straw-coloured fluid escaped. The sloughy appearance terminated suddenly in the neck about an inch from the vagina, by an irregular, ragged, yet well-defined line all round. This ragged line formed the boundary and commencement of the healthy mucous membrane passing into the vagina; it could be lifted and peeled all round, and was clearly the thick epithelium. The vagina was congested, but healthy, and not of undue length.

There was nothing particular about the sigmoid flexure of the rectum; the liver was healthy; gall-bladder much distended; stomach empty, except a little yellow mucus; everted, the mucous surface along the under part and at the curve was a beautiful specimen of bright punctiform injection, with a few dark maculæ at the fundus, and towards the pylorus it had a yellow tinge. The anterior, or upper surface was pale throughout, neither injected nor tinged; the whole surface sound; pylorus natural. Heart and lungs healthy; the right lung had in its upper lobe two or three stony bodies, of the size of peas, and had old adhesions in the upper and posterior part; a slight puckering on apex of left lung. Brain not examined.

QUEEN'S COLLEGE, BIRMINGHAM.

Report of the Council.

At the annual meeting of Queen's College, held on Wednesday, August 25th, The Right Honourable Lord Lyttelton, the Principal, in the chair, the following report was read, and on the motion of the Honourable and Rev. G. O. Yorke, seconded by C. N. Newdegate, Esq., M.P., was unanimously adopted:—

In making their twenty-first report, your Council rejoice to state that the past year has been distinguished by the steady progress of your Institution in a degree which its most sanguine friends could scarcely have anticipated. In pursuance of the address to the public issued by your Council in June, 1846, a department for "improving the preliminary education of students in medicine and surgery, by affording to them the advantage of receiving within the walls of the College early instruction in Latin and Greek, and mathematics, with the modern languages and the sciences," was established in October last, and has already produced results which are highly satisfactory.

The number of students registered as studying at Queen's College within the period comprised between the first of October, 1846, and the present date, is fifty-three. The number of students registered as being in attendance on the medical classes of the senior department is forty; and of the students in attendance on the classes of the junior department is thirteen. Thirty-three students have in the above period attended the medical and surgical practice of the Queen's Hospital, and seven at the General Hospital. Of the students in the senior department, nineteen have been in residence within the walls of the College; ten have been residing with medical practitioners, in or near Birmingham; three have been living with their parents or guardians; five have been in lodgings; and *one* at the General Hospital; and of two the residence is not ascertained. The number of students entered to the junior department, and in residence with the College tutors, has been eight; and non-resident students in the same department five.

The report of the senior resident tutor on this subject is as follows:—"A spirit of zeal and application has pervaded the students in the class (*i.e.* junior) department, so that all, whether gifted with superior or inferior abilities, may truly be said to have improved their respective talents. In proof of this, I need only appeal to the periodical examinations, and to that for matriculation which has lately taken place in the University of London, at all of which the knowledge displayed by the candidates was very creditable. The prizes in my department have been well contested.

The mathematical tutor in his report states:—"The general behaviour of the students, their attention and application to their work, have been as satisfactory as I could wish, and their progress on the whole has come up to the standard set them. Some have shot far beyond the mark, whilst others again have fallen short of it, but the average of the whole is good and above mediocrity."

The medical tutor reports:—"The conduct of the students of the junior department has been

unexceptionable, and for evidence of their general progress in the studies which it devolves on me to conduct, I must refer to the manner in which they have passed their sessional examinations." The attendance of the students of this department on the classes of French, German, and drawing, has been less satisfactory. It will be at the option of the parents or guardians of the students whether they shall attend them or not. Subject to these conditions the attendance of the students will be enforced at the several classes.

In corroboration of the preceding testimony by the several tutors, it appears, from the matriculation list of the University of London, that of four students presenting themselves in July, all have passed; one was placed in the second division, three in the first division, and one obtained honours in chemistry; and it is worthy of remark, that one of the students referred to as having been placed in the first class, in July, 1847, (Edney,) was unacquainted even with the Greek characters in the preceding October; and also that the student who obtained honours in the chemical examination conducted by Professor Graham, (Fryer,) was totally unacquainted with that science at the same date.

As regards general discipline, the state of the junior departments has upon the whole been satisfactory. Some instances of irregularity have required the lighter restraints and penalties, to which a resort is authorized under the bye laws, and in one instance it was necessary for the well-being of the College to have recourse to the grave punishment of expulsion. With regard to the general condition of the College, the senior tutor reports:—"It is permitted to me to speak generally in terms of high commendation. The system framed for the government of the College is so clear, and the spirit of the students has been so uniformly respectful and observant, that I have experienced much less trouble in the discharge of my duties than I could reasonably have expected. The chaplain's register, kept by me, shows that the attendance at Divine service has been very good, and the attendance of the students, both senior and junior, at the theological lectures, has been quite satisfactory."

The first important question which came under the consideration of your Council was the following communication addressed to the Dean of the Faculty, by the Registrar of the University of London, notice having been given by a member of the Senate of the University, of his intention to submit for the consideration of the Senate the following series of propositions:—

"That all candidates for the B.A. degree shall be examined either in one of the books of the Pentateuch, in the original Hebrew, or in one of the four Gospels, or the Acts of the Apostles, in the original Greek, and also in Scripture history.

"That with regard to this examination, the following regulations be adopted:—

"1st. That a board of examiners in these subjects be constituted, to consist of not fewer than five persons.

"2nd. That the examination be conducted wholly on paper.

"3rd. That all passages and questions proposed for the examination of the candidates be submitted to the whole board of examiners, and that no passage or question be determined on unless it have received the sanction of a majority of at least four out of five of them.

"4th. That none of the questions fixed upon be of a doctrinal nature, and that no question be so put as to require an expression of religious belief on the part of any candidate.

"5th. That a printed paper be placed before each candidate, having on one side the passages selected from the Hebrew text, with questions relating to the Old Testament only; and on the other, passages selected from the Greek text, with questions relating to the New, as well as the Old, Testament; and that candidates, without being asked any *vivâ voce* question on the subject, be allowed to chose whichever side of the paper he may think proper.

"6th. That no answer nor translation given by any candidate be objected to on the ground of its expressing any peculiarity of doctrinal view, provided always that it be decorous in tone and language.

"7th. That no candidate be declared not to have passed, except with the consent of at least four out of five of the examiners.

"The opinion of the constituted authorities of Queen's College is requested thereupon."

After mature deliberation, the following reply from your Principal was unanimously approved and adopted.

Hagley, March 6th, 1847.

Sir,—Your communication to Wm. Sands Cox, Esq., Dean of the Faculty of Queen's College Birmingham, of date Nov. 11th, 1846, on the subject of certain propositions relating to a proposed examination in scriptural subjects, through which all candidates for the B.A. degree in the University of London should pass, upon which the opinion of the authorities of Queen's College was requested, came before the Council this morning, and I am empowered, as Principal of the College, to send to you the following reply to that communication. I regret that by some mistake it was not brought before the Council at an earlier period. The essential principle of the constitution of Queen's College, in so far as it bears upon the present question, is, that the students who are admitted within its walls for the purpose of receiving classical, mathematical, and professional instruction, shall also receive religious instruction, and be subject to religious discipline, according to the principles of the Church of England. This last provision, however, may be taken rather as what appeared to the Council to be the necessary mode of giving effect to a general principle, than in itself constituting such a general and fundamental principle.

That general principle then is this:—That the religious character is essential to the very idea of a complete education, or rather to education itself when rightly understood. Assuming, therefore, this principle, to which the Council considers itself pledged by the very constitution of the College; looking at the expressed intention of the Charter of the University of London, of securing a regular and liberal course of education for the student, for whom it provides degrees; and considering the present state and practice of the

University of London in this respect, the Council of Queen's College feel that they cannot do otherwise than recognize in the projected regulations an improvement upon that state and practice. At the same time, while the Council feel unable to give an opinion, whether there may not be circumstances attending the position and constitution of the University, which renders any further movement in the direction of the proposed change impossible, they feel bound, in accordance with the constitution of their own College, to state they can only look on the regulations as presenting an imperfect approximation to what they consider essential to a course of regular and liberal education.

I have the honour to be, Sir,
Your obedient servant,

R. W. Rothman, Esq., LYTTELTON.
Registrar.

Your Council have since learnt that the proposed regulations were not submitted to the Senate of the University.

The next important subject to which your Council have to direct your attention, is an especial mark of Royal favour, conferred on the College in the grant of a Supplemental Charter of Incorporation. It had been suggested by your great benefactor and Visitor, and it appeared to your Council desirable, that the Crown should be petitioned for additional powers, in order to give permanency to your extended system of education, which system, in respect of instruction, in addition to all the departments of medicine and surgery before taught, now embraces a wide range of literature, science, and art, together with lectures on the doctrines and duties of Christianity according to the teaching of the Church of England.

It had farther appeared to the Council desirable, to endeavour to obtain consolidation of the union between the College and the Queen's Hospital, by incorporating the Hospital with the College, the Hospital having been erected upon resolution of your Council in 1844. On a petition founded on these views and recently presented, Her Majesty has been graciously pleased to confer on your Principal and Council, powers to be "able and capable in law to take, purchase, and hold for the use of the said Queen's College, and for the use of the said Queen's Hospital, in Birmingham, any goods, chattels, and personal property, whatsoever; and shall also be able and capable in law, notwithstanding the statutes of mortmain, to take, purchase, and hold to them and their successors, not only all such lands, buildings, hereditaments, and possessions, as may from time to time be exclusively used for the sites and immediate purposes of the said College and Hospital respectively, but also for the use and maintenance of the said College, any other lands, tenements, and hereditaments, and possessions, whatsoever, not exeeeding the annual value of £2500. And also for the use and maintenance of the said hospital any other lands tenements, hereditaments, and possessions whatsoever, not exceeding the annual value of £2500."

To give perpetual succession to the Council,
The Lord-Lieutenant of the County of Warwick.
The High Sheriff of the County of Warwick.
The Dean of the Cathedral of Worcester.
The Archdeacon of the Archdeaconry of Coventry.
The Mayor of the Borough of Birmingham.
The High Bailiff of the Manor of Birmingham.
The Rector of Saint Martin, Birmingham.
The Rector of Saint Phillip, Birmingham,

have been appointed by the Crown, for the time being respectively, by virtue of their respective offices, members of the Council. To give encouragement to such as manifest diligence and acquirement in their respective studies, the Council have received under the charter the power to elect such as hold a diploma in medicine or surgery, or are graduates in medicine, law, or arts, or such members of the Birmingham Royal School of Medicine and Surgery, to the honourable distinction of "Fellows," with such powers and privileges as may be determined upon from time to time, under the bye-laws, and in connection with this privilege, the Council deem it especially incumbent on them to call the attention of the wealthy friends of education to the fact that, by their Charters, they are enabled to accept on behalf of the said College, gifts and endowments to a large amount, for promoting particular objects of education—viz., by the foundation of Scholarships, Exhibitions, and Fellowships, and it is hoped that ere long, such may be established to assist the studies of the deserving student.

It ought to be gratefully recorded by your Council, that the whole of the heavy expenses attendant on obtaining the supplemental charter, have been defrayed by the Rev. Dr. Warneford, your Visitor, and Mr. Chancellor Law, your Vice-Principal.

In reference more particularly to the senior department of the College, your Council reports that it has very fully maintained its former character. The professor's records of the attendance at the classes, placed on the table at the Monthly Boards, have afforded proofs of diligence and regularity, and the class examinations have been favourably noticed by the examiners. As a mark that the students themselves have appreciated the importance of the system of moral and religious discipline provided in the College, the Council cannot forbear mentioning that a subscription has been set on foot among them, and nearly completed, for placing a window of painted glass in the College chapel.

Some new suggestions as to the residence and discipline of the non-resident students have been adopted, in accordance with the report of a sub-committee, as follows:—"Non-resident students will be admitted to either department, to reside with their parents or guardians, or with a relation or friend selected by their parents or guardians, and approved by the Council. The senior students will be allowed to reside in lodgings approved by the senior tutor and Dean of the Faculty. The senior tutor and Dean of the Faculty are authorized to enquire into the habits and general conduct of the out-students at their respective residences, and to report to the Council thereupon at the end of every term. Out-students, if members of the Church of England, will be required to attend Divine Service every Sunday

in the College chapel, unless the parent or guardian of the student requests the attendance of such student at his own place of worship. If the student be attached to any other communion, he will be expected to attend at the place of worship belonging thereto every Sunday. Non-resident students will be allowed to attend the weekly services at the College chapel, and to dine in the College hall, either regularly or occasionally, on giving such notice, and paying such sum, as shall be fixed by the Council."

In furtherance of the great object of completing the system of collegiate discipline, and with a view to induce the utmost possible number of students to become resident, it appears to your Council to be highly desirable to complete the College rooms, and to erect a theatre for lectures, laboratory, and gymnasium, according to the original plans of the College, furnished by your able architects, Messrs. Bateman and Drury, at the earliest period that shall be practicable; and the Council have again the pleasing duty of recording that Dr. Warneford, in his unvarying desire to promote the great ends of the College, has generously contributed to that object the sum of £500., which has been placed to the account of "a building fund." Miss Burdett Coutts has further added the handsome donation of £100. The Council has much gratification in recording also that the Right Rev. the Bishop of St. David's, has enrolled his name in the list of Honorary Governors, and has contributed a donation of £20. to the general purposes of the College.

In order to protect the College buildings, your Council have found it necessary to obtain an injunction from the High Court of Chancery against the Directors of the Birmingham and Stour-Valley Railway Company, whose operations in forming their tunnel have injured your property.

Some changes, such as from various causes must from time to time occur, in the several departments of the College, have taken place in the last year. Dr. Tilley has retired from illness, and Mr. Shaw has been elected in his room to the chair of Chemistry, an appointment from which very high expectations are justly entertained. Dr. Sandys, from a change of residence, has also resigned the office of Physician to the Queen's Hospital, which has been filled up by the election of Dr. Wright, who, like his predecessor, has pledged himself, "after a reasonable time for preparation, to teach in the College any department of medical education, upon a request to that effect from the Council and Professors, provided such department should not be inconsistent with the province of a physician."

But few additions have been made during the past year to your museums, in consequence of the heavy expenses attendant on the extension of the College system; but an application was made to the Radcliffe trustees for a grant to promote the objects of your College, which, although not successful at the present time, it is hoped will eventually be of service, and enable your Council to purchase philosophical apparatus, and expensive books of plates, &c. Your Council, under these circumstances, have only been able to vote a very limited sum towards the purchase of the pathological museum of the late Dr. Felix Thibert; but in the further prosecution of that object, the Dean of the Faculty has been promised already material assistance from the patrons and friends of your College.

In the library of medical science, there has been no material change within the year; to the library of general literature your generous Vice-Principal has added to his former contribution upwards of 800 volumes.

[The report here bears merited testimony to the exertions in behalf of the College, of the Principal, Lord Lyttleton; the Vice-Principal, Mr. Chancellor Law; the Dean of the Faculty, Mr. Sands Cox; the several Tutors, and Masters; and in conclusion announces the award of prizes.]

JUNIOR DEPARTMENT.

Prizes awarded at the end of the Winter Session..

Classics,	W. H. Fryer, Coleford.
Mathematics,	A. Wall, Stratford-on-Avon.
Chemistry,	W. Edney, Craig Kilmarnock.

Prizes awarded at the end of the Summer Session.

Theological Prize, Mathematical Tutor's Prize, Medical Tutor's Prize,	W. H. Fryer, Coleford.

SENIOR DEPARTMENT.

Prizes awarded at the end of the Winter Session.

Anatomy and Physiology,	Peter H. Bird, London.
Surgery,	A. H. Paterson, Stourbridge.
Practice of Physic,	Peter H. Bird, London.
Certificate,	— Brown.
Materia Medica,	— Moore, Halesowen.
Demonstrator's Prize,	G. Hodges, Ludlow, P. H. Bird, London.

Prizes awarded at the end of the Summer Session.

Chemistry,	T. C. Lane, Grosmont.
Botany,	Thos. Lowe, Birmingham.
Forensic Medicine,	H. T. Whittle, Leamington.
Certificate,	O. W. Barratt, Birmingham.

The prize of five guineas, offered by T. E. Piercy Esq., for the best examination in German, has been obtained by E. A. J. Wilkinson, Northleach. The prize of five guineas, offered by Dr. Smith, for the best examination in the French language, has been decided in favour of Mr. Stead.

Mr. Ireland, of Malmsbury, and Mr. Lane, of Grosmont, have this year gained the Warneford scholarships, by regularity at chapel, general good conduct, and successful examination.

The Warneford gold medals, the Jephson prize of twenty guineas, and the gold medals offered by Professors Davies and Cox, for the best clinical reports of medical and surgical cases treated at the Queen's Hospital in their practice, are still under consideration.

General Retrospect.

PATHOLOGY.

PARALYSIS IN THE INSANE.

The following communication is contained in the *Union Médicale*, from M. Baillarger, physician to

the Salpétrière. There is a form of paralysis met with among, and apparently confined to, the insane, but one which presents many features of great interest both to the physician and physiologist, and to the intellectual philosopher. It has been a question among authors, whether the disease commences with the disorder of intelligence, or by the lesion in the movements. M. Baillarger says, the error of those physicians who regard the lesion of the movements as rarely preceding that of the intelligence, lays in this,—that they have not paid sufficient attention to the passing symptoms of paralysis. A patient is attacked with cerebral congestion and loss of consciousness; when he recovers, some embarrassment is noticed in his speech. This symptom rapidly fades away, but after some hours or some days a delirious state of the mind supervenes, marked by a predominance of ambitious ideas. The lunatic now examined presents no difficulty in his speech; and, as yet, no feebleness of the lower limbs is noticeable. After some months, a year, or even more, evident symptoms of general paralysis offer themselves, either spontaneously, or after a fresh attack of cerebral congestion. All the cases of this description are set down as those where general paralysis is consecutive to intellectual disorder. To view them thus appears wrong, for the lesion of movement marks the onset of the malady, although it rapidly passes away. Sometimes, indeed, the lesion of motion is still less marked, for there may be but attacks of giddiness and partial insensibility, liable to frequently recur, but, nevertheless, followed by the development of those ambitious notions which characterize the unsound mind in general paralysis. In short, then, a disorder of the intellect often precedes the permanent establishment of the symptoms of general paralysis; but it is itself, in almost all cases, preceded by short-lasting lesions of movement.

The contrary opinion, held by many, is explicable, from the following reasons:—1. They have not distinguished between the passing and permanent lesions of the movements. 2. The slight lesions of motion are often suspended, or, so to speak, masked in excited patients. 3. In most cases the accounts given by friends have been trusted to, whereas they should not. 4. The slight signs of paralysis, which occur among some patients at irregular intervals, have been overlooked.

This question as to the priority of the lesion manifested at the beginning of general paralysis being settled, there is yet another respecting the order in which the symptoms disappear in those cases—very rare though they be—in which an improvement takes place, or still more rarely, recovery. When an amelioration of the symptoms of general paralysis takes place, it is not alike in the two kinds; the disordered intelligence disappears, but the paralysis persists or declines much more slowly than the former.

General paralysis never arrives at its last stage without the enfeebling, or even the abolition, of the intelligence; but there are numerous cases in which delirium is wanting. Such patients are no more lunatics than are those apoplectics who fall into a state of dementia. The pure and simple abolition of the intelligence and mania are two things quite different. In one case given by Bayle, the patient answered questions rationally, and appeared sensible of his unfortunate situation; and it was not till the general paralysis had lasted three months that delirium supervened. In another case the patient only suffered from a great defect of memory, talking with reason, but repeating the same inquiries, and thus continued till death. These cases are more frequent than is generally thought. We may say, then, that general paralysis may exist without delirium.

The facts indicated will go to establish the following:—1. That in general paralysis lesions of movement most frequently precede the signs of loss of intelligence. 2. That the defect of intelligence ceases before the disappearance of the symptoms of paralysis, when the disease tends to a cure. 3. That general paralysis may exist in many cases without delirium. And they establish the opinion, that the lesion of movement is the primitive and principal element;—that the mental alienation is a secondary phenomenon, but absent in many cases;—that mania and general paralysis are independent and distinct maladies.

SURGERY.

ON THE BEST MODE OF OPENING CERTAIN ABSCESSES.

Dr. Hargrave criticizes the ordinary practice of opening abscess in the groin by an incision parallel to Poupart's ligament. He states that in this case the lips of the wound are never at rest, being continually displaced by the movements of the abdomen and by the motions of the thigh, which movements cannot be entirely prevented by the best adjusted bandages. These unpleasant results can, he observes, be always obviated by opening the abscess by an incision at right angles to Poupart's ligament. By this practice the abscess is fully evacuated, the lips of the wound assume an oval figure, they remain in repose, not being affected by the abdominal movements, and when the incision heals, the mark is scarcely apparent.

There are certain deep-seated abscesses, occasionally met with in localities rendered dangerous by the proximity of large vessels, such as the calf of the leg, the sole of the foot, and the neck. Dr. Hargrave asks when the abscess is in the calf of the leg, at a considerable distance from the surface, between the thick superficial, and deep layer of muscles, and in the vicinity of the popliteal space, are we to cut boldly down to the matter, as is advised by some surgeons? Dr. Hargrave thinks not, but recommends instead, that a careful examination be made along the external and internal part of the leg; and if the abscess points externally, to make the incision parallel and posterior to the fibula, which will allow of the separation of the muscles, and puncture of the abscess without risk.

In opening abscess in the sole of the foot, in which the matter has a tendency to pass through the metatarsal spaces, and to point on the dorsum of the foot, he advises that the pus be evacuated, not by a direct puncture through the sole of the foot, but by incising along the outer edge of the foot, near the fifth metatarsal

bone, when, by dividing the subjacent tissues, the very centre of the sole of the foot may be reached without danger of wounding any important part.—*Dublin Medical Press*, June 2, 1847.

DR. PANCOAST'S OPERATION FOR VESICO-VAGINAL FISTULA.

The peculiarity of this operation consists in attaching the two sides of the abdominal opening firmly together, on the principle of the tongue and groove, so as to get four raw surfaces into contact, and thus increase the chances of union by first intention. The operation is thus conducted:—

Having exposed the orifice by a Charriere's speculum, from which the sliding blade is removed, the first object is to split up the posterior margin of the fistula to the depth of half an inch, with a sharp pointed bistoury; the edges of the other lip are then pared off, so as to bring it into a wedge shape, first reverting it with a blunt hook, and trimming off the vesical mucous membrane with the curved scissors, and then detaching the vaginal mucous membrane in like manner, to the breadth of three quarters of an inch, along the whole extent of the lip. This is a difficult, but important, part of the process. The next object is to insert the raw wedge or tongue into the groove of the opposite lip of the fistula, and to retain them in apposition. This is accomplished by a peculiar suture, which the operator calls the "plastic." The threads are passed with short sharply-curved needles; a fine catheter is then passed, and cold applied to the vulva to moderate re-action. Subsequently sulphate of zinc injections are used.—*Medical Examiner*, May.

SIMPLE METHOD OF EXTRACTING PINS OR OTHER SHARP BODIES FROM THE URETHRA.

M. Boinet relates two cases in which the patients, in introducing pins into the urethra, under, or for the purpose of producing, venereal excitement, had allowed them to escape from their hands. In each case he was enabled to extract them by the following simple process:—

He first passes a finger into the rectum, if necessary, or presses it against the lower part of the urethra, so as to form a point of resistance to the head of the pin; he then bends the penis directly over the point, and forces the latter out through the walls of the urethra; the pin is then seized, and readily extracted. No injurious consequences followed the perforation of the urethra in the cases related.—*Journ. des Conn. Medico-Chirurg.*

MIDWIFERY.

ULCERATION OF THE CERVIX UTERI A CAUSE OF ABORTION.

Dr. H. Bennet has placed a communication in the *Lancet*, with the object of vindicating himself from the charge of having only incidentally alluded to the above cause of abortion, which is brought against him in a work recently published by Mr. Whitehead. Dr. Bennet clearly shows that he had somewhat strongly insisted upon the above lesion as a cause of abortion, and that it had been still earlier commented upon by Boys de Loury. (This latter author's remarks may be found in Dr. Ranking's "Half-yearly Abstract," vol. 2, p. 172.) His paper concludes with the following propositions, which he had previously published in the *Lancet* of last December.

1. Inflammatory ulceration of the uterine neck is not an uncommon disease in the gravid uterus, although hitherto overlooked.

2. When this disease exists in the pregnant state, its symptoms are the same as in the non-pregnant female, but obscured and modified by pregnancy.

3. It is a frequent cause of disordered health during pregnancy, or of "laborious pregnancy." It is also one of the most frequent causes of abortion, both in the early and the latter months of pregnancy. It may occasion abortion, either directly, by reflex action, or indirectly, by giving rise to disease of the ovum or placenta, or to uterine hæmorrhage.

4. The instrumental examination of females labouring under inflammatory ulceration of the cervix during pregnancy, is unattended with any risk, either to the mother or to the fœtus; and it is absolutely necessary, in order not only fully to recognize the disease, but also to treat it.

5. The treatment of these forms of uterine inflammation must be governed by nearly the same rules in the pregnant state as in the non-pregnant state. A properly conducted treatment is nearly always successful in preserving the life of the child and the integrity of the pregnancy, as well as in curing the inflammatory and ulcerative disease. It is also the only means we possess of warding off the imminent danger of abortion to which the patient is exposed.

6. This form of uterine inflammation being, generally speaking, the cause of those repeated and successive miscarriages which prevent females giving birth to a living child, it is only by curing it that we can hope to make them bear the product of conception to its full period.

7. The serious inflammatory and hæmorrhagic symptoms which sometimes follow abortions, are generally occasioned by unrecognized inflammatory ulceration of the uterine neck. On investigation, it often becomes evident that this disease existed previous to the abortion, and occasioned it. The same remark may apply to some cases in which the above-mentioned symptoms precede and follow labour at the full time, as ulceratve inflammation of the cervix in the pregnant state is by no means *necessarily* followed by abortion.

8. Although inflammatory ulceration of the cervix seems generally to be a cause of sterility, yet, as will appear from the above essay, there are frequent exceptions to the rule. In some females, the tendency to become impregnated is so great that no amount of uterine disease appears to prevent conception taking place.

MATERIA MEDICA.

EFFECTS OF COFFEE ON SULPHATE OF QUININE.

M. Desvouves having made known the fact that an aqueous infusion of roasted coffee destroyed the bitter taste of sulphate of quinine, (a fact, by the by, which has been long known in Martinique and elsewhere,) M. Martin was of opinion, that some investigation

should be had on the nature of the re-action of these two substances on each other, before medical men employed coffee as a vehicle for quinine, and accordingly made some experiments on them. On mixing the quinine in powder with coffee a re-action was instantly caused; part of the sulphate of quinine united with the tannin of the coffee with which it formed an insoluble compound; another portion of the salt united with the fatty oil and vegetable extractive into a pasty mass; and a third portion combined with the free acids always found in infusion of coffee. M. Martin found that coffee was not the only infusion that precipitated the solutions of sulphate of quinine; tea also formed insoluble compounds with it, and a marked difference could be perceived in the action of this mixture from that of infusions of indigenous plants. The infusion of tea of good quality contains much tannin, as is shown by a few drops of a solution of sulphate of quinine, while the precipitate is almost nothing when added to adulterated tea.—*Journ. de Chimie Médicale.*

TOXICOLOGY.

POISONING FROM SWALLOWING PERCUSSION-CAPS.

Mr. Foster relates the case of an infant aged fourteen months, who appeared to be sinking fast from the effects of some percussion-caps which it had been observed to swallow. The eyes had a hollow glazed appearance, with great heat in the epigastric region, and coldness of the extremities. The bowels had been profusely purged; vomiting was excited by ipecacuanha, but this appeared to prostrate the child so much that it was checked by a laudanum injection. An alkaline purgative was then given to neutralize the acid which might be present, and in an hour the child became tranquil. The next day several percussion-caps, deprived of their fulminating material, were found in the stools.—*Medical Examiner*, June, 1847.

THE MEDICAL REGISTRATION BILL.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The question at issue between Dr. Shearman and myself respecting the Medical Registration Bill is simply this:—With regard to medical men who have not a license to practise generally, would the intended legalization of them, as general practitioners, by Mr. Wakley's bill, and by the Institute, amount to the same thing? No one can answer in the affirmative, for they are two *very different* plans; whilst four questions will occur to every one after reading the Doctor's letter in your number of May 21st. 1. Do not the third and fourth "reasons" signify that the Council of the Institute are double-faced, and do they not impugn their principles? 2. Does not the concluding part of the letter impeach their ability as a managing committee? 3. Does not the publication of that letter abuse and revile the Council of the Institute? And, 4, does not the Doctor by the letter give me the full choice of every style of reply?

It is quite immaterial what answers Dr. Shearman or I give to these questions; your readers will judge for themselves respecting them, as well as in regard to the respective motives of a member of the Council of the Provincial Association, and a member of the Council of the Institute.

The force of a quotation is dependent upon its exact and perfect adaptation, and it is very evident that the Doctor's quotations have a far greater affinity to himself than to me, as to "the leather," since the Doctor has said "that because the Council differ from *him* in opinion they do not think rightly," the leather adheres too tenaciously *to him* to be ever brushed off—it is indelible!

Although a foretaste of Secretary of State Medical Legislation has been quite sufficient to satisfy me, yet, I cannot object to Dr. Shearman's desire to see such legislation; for we may readily agree to differ in opinion (if *he* will agree,) respecting this matter, as well as with regard to the best means for obtaining certain ends.

It appears to me, that the more efficiently general practitioners are educated, the more able and willing they will be to meet physicians in consultation.

The Council of the Institute, as a body, have not noticed any groundless effusions, and the consequences have been, that great numbers have been misled upon different points; the subject of medical politics has been involved in mystery, and there has been a good deal of unnecessary and useless writing and printing; however,

Magna est veritas et prevalebit,

mere assertions are not arguments, and our thanks are due to Dr. Shearman for having displayed his inability either to *prove* a single charge against the Council, or to advance any tenable *argument* against the establishment of the Institute. Moreover, I think he has done much to show that the establishment of a National Medical Institute is essential for the future respectability and welfare of the profession, as well as for the requirements of the public.

I am, Sir,

Yours very truly,

July, 1847. W. ALLISON.

Medical Intelligence.

THE LONDON AND PROVINCIAL MEDICAL DIRECTORY.

By the time our present number reaches the hands of our subscribers, they will have or ought to have received the annual circular from the Editors of the above work. The importance of such a publication to the medical community cannot be questioned, and we therefore hope the feeling will be general in the profession to co-operate with the Editors in making it correct, by acceding to their wishes in reference to the interrogatories contained in their circulars.

APPOINTMENTS.

W. Dashwood Kingdon, Esq., M.D., has been elected Resident Medical Superintendent to the St. Thomas' Hospital for Lunatics, near Exeter, in the room of Luke Ponsford, Esq., resigned.

Mr. John Marshall has been appointed to the office of Demonstrator at University College, London, in the room of Mr. Phillips Potter, deceased.

M. Dubois, (d'Amiens,) has been elected Secretary to the Academy of Medicine, Paris. The unsuccessful candidates were MM. Royer-Collard, Réveillé-Parise, Mélier, Bousquet, Renauldin, and Bourdon. At the first scrutiny, the numbers were, for—

M. Royer Collard - - - - 27
M. Dubois - - - - - - - 24

At the second scrutiny—

M. Royer Collard - - - - 42
M. Dubois - - - - - - - 41

As neither of the candidates had yet obtained a majority of the votes present, a third scrutiny was then held, when the numbers were, for—

M. Dubois - - - - - - - 56
M. Royer Collard - - - - 43

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, August 20, 1847:—S. G. Bousfield; T. A. Rogers; W. H. Cook; E. B. Sinclair; W. A Roche; R. E. Jones; M. A. Levan; M. Halley; E. C. Curran; R. Gunn; J. Newton; D. G. Jones.

Gentlemen admitted Monday, August 23rd:—W. L. Cashel; R. T. Spark; C. Ferraley; T. W. Crosse; R. Abercrombie; J. M. Camplin; M. J. Booth; C. T. Wagstaff; W. O. J. Wollaston; B. F. Matthews.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, August 12, 1847:—Benjamin Fielding Matthews, Bedford; Joseph Meldon Dempsey; Thomas Green, Grassmere.

Gentlemen admitted Thursday, August 19.—T. Hunter, R.N., Budleigh Salterton, Devon; M. F. Bush, Trowbridge; S. Griffiith; J. Simmonds Nedham, Leicester.

Gentlemen admitted Thursday, August 26th:—Thos. Morris Ward, Ollerton; Patrick Downey, York; William Hand, Northwich; George Alfred Rhodes, Wakefield; Sherard Freeman Statham, Cranford, Middlesex; William Emerson.

OBITUARY.

Died, Aug. 9th, at Edinburgh, Andrew Combe, M.D. Dr. Combe was the author of several highly esteemed works on Popular Physiology and Hygiène, and deservedly respected by his numerous friends, and by his professional brethren.

Aug. 10th, at Condonstown, of fever, David Barry, Esq., M.D.

Aug. 17th, at Lakeview, Mountnugent, of fever, Thomas Draper, Esq., Medical Attendant of the Dispensary and Fever Hospital of Ballymachugh, Cavan.

Aug. 20th, at Roscommon, of fever, Stephen H. Browne, Esq., M.D., Surgeon to the Infirmary and County Gaol, Roscommon.

Aug. 26th, at Oxford, aged 47, John Wootten, Esq., M.D., of Balliol College, Physician to the Radcliffe Infirmary.

Aug. 28th, Kenrick Watson, Esq., of Stourport, F.R.C.S., one of the earliest members, and a member of the Council, of the Provincial Medical and Surgical Association.

Sept. 1st, in Gloucester Place, aged 74, Sir Richard Dobson, M.D., F.R.S., &c., Inspector of Hospitals and Fleets, and a Knight of the Foreign Orders of St. Vladimir, and of Dannebrog.

Lately, at Frankfort on the Maine, Sir John Hamme', M.D.

BOOKS RECEIVED.

A Guide to the Use of the Buxton Waters. By William Henry Robertson, M.D., Physician to the Buxton Bath Charity. Fourth Edition revised. London: Churchill. 1847. pp. 32.

The Consciousness of Right and Wrong, a first Test of the Plea of Insanity in Criminal Cases, &c. By C. Lockhart Robertson, M.D., Medical Staff, attached to the Military Lunatic Asylum, at Yarmouth, &c. Edinburgh. 1847. 8vo. pp. 18.

Health of Towns and of London Associations. Unhealthiness of London, and the necessity of Remedial Measures, &c. By Hector Gavin, M.D., F.R.C.S.E., Lecturer on Forensic Medicine at Charing-Cross Hospital. &c., &c. London: Churchill. 1847. 8vo. pp. 69.

The Microscopic Anatomy of the Human Body, in Health and Disease, &c. By Arthur Hill Hassall, F.L.S., &c. Part X. London: Highley. 1847.

On the Structural Relation of Oil and Albumen in the Animal Economy, and on certain Physical Laws connected with the Origin and Development of Cells. By John Hughes Bennett, M.D., F.R.S.E., &c., &c. (Read to the Royal Society of Edinburgh, April 19, 1847.)

ERRATA.

Page 456, col. 1, line 14 from foot, for *measure parted* read *manner secreted*; line 10 from foot, for *hæmorrhagia* read *menorrhagia*.

Page 466, col. 1, line 16, for *natural* read *mutual*.

Page 467, col. 1, line 5, for *representation* read *representative*.

Page 458, col. 2, in Mr. Higginbottom's paper, On the Use of Nitrate of Silver in Erysipelas, the quantity of water employed in the solution is erroneously stated at *four ounces* instead of *four drachms*. The prescription should stand thus:—

R. Argenti Nitratis ..... scr. ii.
Acidi Nitrici..... gtt. vj.
Aquæ destillatæ ..... dr. iv
M. Fiat Solutio.

TO CORRESPONDENTS.

Communications have been received from Mr. A. Prichard; C. A.; an Admirer of Zeal; Mr. F. Buckell; Mr. H. Clark; Scrutator; Mr. Daniell; Dr. Campbell; Mr. H. B. Pickess.

A London Surgeon.—The Council Prize is open to general competition, and not confined to members of the Association.

The continuation of the report of the proceedings at the Annual Meeting of the Newton Branch will be given in the next number.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(*Fourth Series of Experimental Researches.*)

By William Addison, M.D., F.R.S., Malvern.

(*Concluded from page* 342.)

"It were disgraceful, with this most spacious and admirable realm of nature before us, where the reward ever exceeds the promise, did we take the reports of others upon trust, and go on coining crude problems out of these, and on them hanging knotty and captious and petty disputations. Nature herself is to be addressed; the paths she shows us are to be boldly trodden; for thus, and whilst we consult our proper senses, from inferior advancing to superior levels, shall we penetrate at length into the heart of her mysteries."—Harvey.

Inflammation.—(*Continued.*)

The texture covering the outer and front part of the eye-ball is termed *tunica conjunctiva*, and is ranked as a mucous membrane. Analysed with a microscope, it is found in its natural and adult condition to be a thin, elastic, transparent, and simply fibrous texture, sparingly supplied with blood vessels. (*Fig. I.*) But in its embryonic or growing state, numerous nuclei and corpuscular forms are dispersed among the fibres, especially along the interior margin of the walls of the nutrient vessels. (*Fig. II.*) The fluid excreted by this texture in health is very small in quantity, merely sufficient to moisten the eye, and more resembling water than mucus.

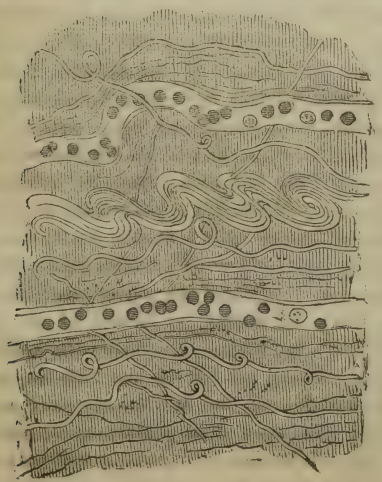

Fig. I.—Nutrient vessels in the fibrous texture of the adult conjunctiva.

Case.

Inflammation of the Tunica Conjunctiva: Purulent Ophthalmia.—A labouring man, aged twenty-seven years, applied for relief from purulent ophthalmia in the left eye, which had existed seven days. The eye-lids were closed and much swollen, and upon my opening them, a large quantity of thick white matter escaped. On examination, the cornea appeared almost buried beneath a very red texture—a fungosity "having a kind of fleshy appearance," into which the natural texture just described had become transformed.

With a pair of curved scissars I cut off a portion of this red and flesh-like mass, the patient at the time complaining of considerable pain. The texture thus removed was, upon trial, found to be strong, elastic, and not tearable; and on submitting it to examination

Fig. II.—Nutrient vessels in the fibrous areolar texture of an infant two days old.

with the microscope, it was found composed of numerous blood vessels containing the usual red and colourless particles, and of four distinct elements,—colourless cells, fibres of different kinds, granular matter, and molecules. The *colourless cells* greatly predominated, occupying the interstices of the fibres. They were filled with molecules; and in some there was one, in others two or three larger rounded or oval particles termed *nuclei*, with a dark or light spot in their centre. Of these *nuclei*, it was impossible to say which were natural and belonged to the normal constitution of the cells, and which were spurious, or formed subsequently to the removal, by the corrugation of the molecular elements; and of the dark and light spots seen in the centre of these nuclei, I could not determine which were due to refraction and which were not.

The *fibres* were of two kinds; the one simple and identical with those seen in the areolar textures, and in the fibrillated protoplasma (buffy coat) of the blood; the other thicker, with a double outline, and terminating in, or springing from, a cell at its extremity. With a little care I obtained a good view of, and was able to trace for a considerable distance, some of the smallest of the vessels, with a power 750. Their coats or walls were comparatively very thick—that is to say, they were on either side twice or three times the breadth of the slender blood-column still visible in their interior. They were composed of the four elements before mentioned—viz., colourless cells, fibres of two kinds,

Fig. III.—Vessels in the inflamed, red, and thickened conjunctiva, (purulent ophthalmia.)

nuclei, and molecules. (*Fig. 3*). No distinction could be drawn between the fibres of the coats of the vessels and of the more distant texture; and it was impossible also to distinguish any difference between the colourless cells still visible in the blood, and those of the coats of the vessels of the texture distant from the vessels, and of the white opaque excretion, except it was observed, that the cells at the inner margin of the vessels, those nearest to, or in actual contact with, the blood column were smaller, and had smaller nuclei than those at the outer margin of the vessels, and of the purulent excretion.

In this example, then, there was an increased redness and vascularity, an energetic nutritive activity, and new nutritive elements constituting the phenomenon termed inflammation. The physical and vital properties of the texture being at the same time exalted and not diminished; for the texture was not brittle, but equally, if not more strong, elastic, and untearable than before; it was not less but more sensible and impatient to the impressions of light and touch, and the microscopic analysis proved that its swelling in growth was due not to any retrograde change or transformation of the natural fibrous elements, but to the increased quantity of blood to the new vessels and the new cell-elements interspersed among the pre-existing and new-formed normal fibrous elements.

It is unnecessary to give any account of the treatment of the case which resulted in "the injured eye being restored to its natural state;" and, (as before observed, with respect to the fractured bone,) the organ being restored to its natural state, the metamorphosis was natural; and being natural, it was also conformable or regular. During the progress of the cure, (that is to say, during the return of an abnormal nutritive activity and an irregular morphology, to normal nutrition and a regular morphology,) the following events and changes were noticed:—The eye became less impatient of the impressions from touch and light; the swelling or fullness of the eyelids diminished; the quantity of opaque white matter discharged was less, and the red and flesh-like texture diminished in bulk, and daily became paler and less vascular; the colour of the discharge at the same time altered; its whiteness and opacity diminished; it was more transparent and mucus-like, then thinner and more watery, the later stages of the diminishing vascularity and excretion being more rapidly passed through than the former.

I have avoided multiplying facts, about which there can, I think, be no reasonable question raised; and taking therefore this case as typical, it furnishes intelligible grounds of distinction between inflammatory and scrofulous diseases, and a rational explanation why the former, as a class, are susceptible of cure, with a return of healthy function, and why the latter, as a class, are so difficult. But first let us notice more particularly the points of relation or identity, and then the essential distinctions between inflammation and scrofula. Both inflammation and scrofulous diseases are found in the same textures—in living vascular textures, in which a nutritive action or metamorphosis is already going on; in both there is a more or less increased supply of blood,—an increased number of new vessels,—a new nutritive energy, and new cellular or protoplasma elements; these being the points of relation between inflammation and scrofulous disease. The essential points of distinction are, that in inflammation the natural elements remain, the new blood-vessels, the increased quantity of blood, and the new nutritive elements, being interspersed among the normal elements, which do not undergo any essential change, or retrograde transformation; on the contrary, the microscope proves that their amount is increased rather than diminished; and experience declares that the vital properties of the texture are exalted. Whereas in scrofulous diseases the microscope proves that the natural elements of the affected textures are changed and disappear, the new vessels, the increased supply of blood, and the new nutritive elements, establishing a morphology of a different kind, and of a lower grade than that necessary for the preservation of the normal elements, bones, cartilages, fibrous and the coherent parenchymatous textures, being reduced to highly vascular and energetic fungosities, or villous corpuscular textures, excreting abundantly early protoplasmatous and corpuscular forms, to the prejudice and destruction of the higher natural elements, experience at the same time corroborating the testimony of the microscope, by testifying to the gradual disappearance of both the physical and vital properties of the affected textures.

Hence, therefore, in inflammation, when the nutritive energy and its accompanying phenomena have been subdued by appropriate treatment, the normal elements not having been destroyed, again resume their accustomed appearance and healthy functions; whereas, in scrofulous diseases, when the abnormal nutritive energy has been subdued, there are no longer the requisite normal elements to resume their usual appearance and healthy function. Hence the difficulty of curing these diseases; and why, when cured, we meet with opacities of the cornea, scars upon the skin, stiff joints, deformed bones, shortened fingers, and puckering in the lungs. But in the morphological study of disease, it is necessary to distinguish between the physical and vital properties of a texture, and the function of the organ of which it forms a part. Thus in inflammation of the lung, (pneumonia,) the texture of some of the inflamed lobules is denser, and quite as coherent as the normal texture, grating against the edge of the knife like a fibro-cartilaginous texture, the morphology being of the abnormally ascending order, whilst the texture of other lobules is soft, brittle, and almost purulent. In both conditions the air-cells are filled up and obliterated, and both, therefore, though differing essentially in their morphological types, are equally incompatible with, and destructive of, the respiratory function.

XV.—Sthenic and Asthenic Inflammation: Acute and Chronic Diseases.

In the case of inflammation of the outer texture of the eye-ball just related, the normal fibrous elements preserved their integrity, and the new corpuscular elements accumulated by the nutritive energy were discharged, or thrown off in the excretion. But now we have to examine analytically, other instances of inflammation in which the abnormal corpuscular elements, from the situation of the part affected, cannot be excreted, but become organized, assume a morphology, and constitute adventitious texture upon the normal structure.

"In no part of the organism" says Hasse, "are the organized products of inflammation more marked than upon the free surface of the pleura, where we meet with solid and fluid matters of every gradation and variety."*

The first appearances of inflammation of the pleura consist in a congested state of its blood vessels, which are seen congregated here and there in dense though delicate nets beneath the still transparent membrane, which now, however, speedily loses its smoothness and transparency, becoming thicker and more dull. At numerous points the bright red colour deepens; these points are somewhat prominent, and crowd together, being encompassed with a progressively enlarging zone of congested blood-vessels. The first rudiments of an adventitious product now become perceptible, the points originally reddened presenting little dull white or yellowish spots, which rise above the serous surface, and often veil the inflammatory redness so thoroughly that it requires a practised eye at once to detect it. During the above proceeding in the serous membrane, the areolar texture between the fasciculi of the intercostal muscles, and also that between the pulmonary lobules, is distinguished by an increased vascularity, and its interstices are filled with a half-fluid, half-gelatinous effusion.

Hasse describes the adventitious products of inflammation of the pleura under the following heads:—The gelatinous, the conditional, the purulent, and the tubercular.

* "Pathological Anatomy," Syd. Ed., 1847, p. 181.

In all cases of inflammation of the pleura, *a gelatinous product* is speedily diffused between the costal and pulmonary surfaces, blood-vessels form in it with surprising rapidity, and where the two surfaces approach each other, a few days appear sufficient to effect a tolerably firm coalition between them.

The conditional products consist for the most part of several homogeneous or else distinctly different layers, largely investing, and adherent to, the pleura. They tear easily, and display a pseudo-fibrous texture. Their surface directed to, and adherent on, the pleura, corresponds in character to that membrane; but their free surface facing the cavity of the pleura is usually soft, and displays a villous fabric. When these conditional products are present, the cavity of the pleura usually contains a considerable amount of either a light-brown, or a reddish, or else a flocculent fluid, bearing, it would seem, a close relation both in quantity and quality to the false membrane itself.

In the *purulent form of the product*, the surface of the pleura is dull, and of a dingy grey, covered with very soft granulations, or with soft and brittle puriform false membranes, which are either loosely adherent to the pleura, or else float as soft flakes in the collected fluid.

"*The tubercular constitution*," says HASSE, "is the frequent source of peculiar modifications; it changes the products of nutrition, and exerts a palpable influence upon the formative process when heightened by inflammation." The peculiar modifications here alluded to have been treated at length in the present memoir, and it remains only to remark, that tuberculous matter frequently manifests itself in the false membranes of the preceding conditional form, which, as HASSE remarks, is inaccessible to the vascularity pervading the texture in which it is embedded.

Now, the gelatinous and conditional products of pleurisy, are early morphological forms, consisting of protoplasma and slightly cohererent cells, which, when they become organized and vascular, are in all respects analogous to an embryonic texture, and it appears that by the subsequent morphology of these elements, the *sthenic or asthenic character of the disease, and the good or bad constitution of the patient are determined.* For if a severe form of pleurisy be cured, it is so by the gelatinous and conditional, or purulent products,—the soft vascular excreting textures,—undergoing the fibrous or fibro-cartilaginous metamorphosis. So also, if a scrofulous joint or a pulmonary consumption be cured, it is by the same morphological forms,—the soft, vascular, excreting textures, passing onward into the non-excreting and less vascular fibrous or fibro-cartilaginous types; and in all these instances we say the constitution of the patient is good. In cases of severe pleurisy, the cavity of the pleura has been opened to allow of the escape of the fluid and non-adherent matters accumulated within it, and the operation has been sometimes once or twice repeated. The first operation frequently gives vent to a clear serum, but when a second or third is required, an opaque and flaky pus escapes. The former occurrence denotes that the gelatinous and conditional products have undergone a fibrous morphology, analogous to that of the protoplasma of the blood when withdrawn in venesection, and it is well known to be the most favourable to the recovery of the patient; whereas the latter occurrence denotes an unconformable morphology and is unfavourable. Moreover, persons who have recovered from an attack of pleurisy, and have afterwards died of other diseases, have been carefully examined; and in such cases the adventitious products of the pleurisy, are found fibrous or fibro-cartilaginous; whereas, in those who die of pleurisy, we find the conditional and purulent products—the early, soft, vascular, and corpuscular excreting textures.

Hence, then, it appears that as scrofulous diseases are retrograde morphological conditions of the growing normal textures, and chiefly, therefore, observed in children and youth, so inflammatory diseases are asthenic, and the constitution bad, when the products accumulated by the nutritive energy or inflammation, persist in a morphological type or growth, which is below or retrograde in comparison with the texture from which they spring. The truth of this conclusion cannot be rightly estimated during life by the health of the patient, and it is necessary again to point to the distinctions between the morphology, which has regard to the forms of elements and textures, and the office or function of the organ of which they form a part. The morphology of the adventitious products of pleurisy may be conformable, assuming a type identical with that of the texture from which they arise; but if they be so abundant or so related as to impede the motions of the lung, the function of the organ will be impaired, and, notwithstanding the conformability of the morphology of the pleuritic products, the nutrition of the whole body will thereby be asthenically inclined; and thus many persons who have recovered from an attack of pleurisy, (considered in its inflammatory form,) have from this source, had their constitutions weakened, and incurred a liability to asthenic forms of disease for the future.

These observations regarding the distinction between sthenic and asthenic diseases, and the conclusions deduced therefrom, are further illustrated and confirmed by the history and phenomena of *gout* and *phlebitis*. Gout is a sthenic disease. The ordinary phenomena of a first attack of gout,—the pain, heat, redness, and swelling, are well-known; but the morphological results of this increased nutritive energy have not been accurately regarded. Their conformable character, however, in the first or early paroxysms, is shewn by a copious exfoliation of the cuticle or epidermis over and for a long distance around the part

affected, by the thickening of the areolar and fibrous textures involved, and the accompanying œdema, and which is most important, by the part being restored to its natural state. But unfavourable conditions, intemperate modes of life, mental anxiety, and other causes, produce repetitions of the attack, and prolong its times and stages. Unconformable products then appear in the affected textures, and *pari passu* with irregular or abnormal morphological phenomena, sthenic gout becomes asthenic.

Phlebitis is an asthenic disease. The blood of pregnant women is well known to contain an unusual abundance of colourless cells and protoplasma, administering to the growth and preservation of the fœtus. When the infant is born, a new but natural channel is opened for these nutritive materials; the breasts experience a physiological and conservative inflammation a new nutritive energy and an increased vascularity are established in them, and a new product is formed for the sustenance of the child. But adverse external conditions, a contagious poison, and other causes, sometimes disturb these events, and a train of phenomena termed *puerperal phlebitis* ensue. The nutritive materials with which the blood is highly charge are unfitted for their office, their morphology is arrested or rendered retrograde, and they accumulate in the circulating fluid, upon the walls of the blood-vessels, and in the textures that have been irritated by the process of the labour; the milk is not at all or only very scantily secreted, and thus arises one of the most asthenic diseases to which the human structure is obnoxious.

Experience suggests that possibly these conclusions may be deemed speculative and theoretical; but let the candid reader be reminded, that no department of human knowledge can assume a scientific form without a theory, and because hitherto physiological or medical theories have presented an unfavourable aspect, still we must not, on that account, relinquish the right use of theory, and repudiate the term. "In framing a theory," says Sir John Herschel, "which shall render a rational account of any natural phenomenon, we have *first* to consider the agents on which it depends, or the causes to which we regard it as ultimately referrible. These agents are not to be arbitrarily assumed; they must be such as we have good inductive grounds to believe do exist in nature, and do perform a part in phenomena analagous to those we would render an account of, or such whose presence in the actual case can be demonstrated by unequivocal signs. They must be *veræ causæ*, in short, which we can not only show to exist and to act, but the laws of whose action we can derive independently, by direct induction, from experiments purposely instituted. We have *next* to consider the laws which regulate the action of these agents, and these we can only arrive at in three ways—1st, by examining all the cases in which we know them to be exercised, inferring, as well as circumstances will permit, the amount or intensity in each particular case, and then generalizing from them, and so arriving at the laws desired; 2nd, by forming at once a bold hypothesis, particularizing the law, and then trying the truth of it by following out its consequences, and comparing them with facts; or, 3rd, by a process partaking of both these, and combining the advantages of both without their defects—viz., by assuming the laws we would discover, but so generally expressed, that they shall include an unlimited variety of particular laws;—following out the consequences of this assumption by the application of such general principles as the case admits; comparing them in succession with all the particular cases within our knowledge; and lastly, *on this comparison*, so modifying and restricting the general enunciation of our laws, as to *make the results agree*."* Now, in the law of the morphology of animal structures to which I refer the phenomena of inflammatory and scrofulous diseases, *the agents* of the metamorphosis are not arbitrarily assumed. We know them to exist in nature. Their presence in normal growth is demonstrated by unequivocal signs, and they perform a part in phenomena analogous to those we would render an account of. *The laws* which regulate their action have been derived by examining the cases of scrofula and inflammation, in which we know them to be exercised, by inductive reasoning from experiments and observations purposely instituted in vegetable and embryo animal textures, and by comparing the assumed law with all the particular cases within our knowledge, *on which comparison the results agree*; so that if my conclusions are theoretical, the terms of a good theory have been fulfilled. Supposing it necessary to inquire further what the agents are, then both experiment and observation afford grounds for concluding that they are the active molecules so copiously distributed amongst the textural elements, and so abundant in the interior of the cells of both vegetable and animal structures; and the colourless cells of blood filled with these molecules remaining stationary, and undergoing changes upon the textures, is a *vera causa*, explaining how, in animal structures, and in the human body, these active molecules are transferred from the flowing nutritive current to the fixed solids.

In bringing to a termination this inquiry into the laws of scrofulous diseases and inflammation in the human body, based upon the phenomena observed in lower structures, and in the growth of embryo-textures, it may be useful to review the facts, and recapitulate the conclusions grounded upon them.

All living bodies grow and are sustained by an epigenesis or *morphology*,—that is to say, by a series of changes and transformations in matter effected in

* "Preliminary Discourse," pp. 197, 199, &c.

closed cells, and consequent upon two necessary *antecedents,—a vital power* or inherent disposition imparted from the parent to the offspring, and certain *external conditions*, in which are included food, air, water, and temperature. The lowest living beings are simple *isolated-cells*; the next in order are aggregates of *slightly-cohering-cells*; then follow the structures, composed of *coherent-cells*; after which come the *fibrous and cartilaginous textures*; and lastly, *bone or wood*. And it is to be particularly observed as we ascend the scale of animated nature, that the additional later-formed or higher elements do not supersede, but are superadded to, the prior ones:—thus fibrous elements are superadded to the cellular; cartilaginous to the fibrous and cellular; and bone to the cartilaginous, the fibrous, and cellular, until in the human body we meet with all the varieties,—osseous, cartilaginous, fibrous, and coherent cellular textures, superadded to slightly coherent and incoherent cells. All these textures, and every organ in the human body, in their primary or embryo state, are groups of slightly cohering cells, from which, by an epigenesis and morphology, are formed coherent cellular textures, traversed by numerous vessels or channels, conveying a current of the primary forms,—incoherent cells; to these are subsequently added various fibrous elements, and lastly, cartilage and bone.

The phenomena of inflammation observe the same order. The first steps of the process are indicated by an unusual accumulation of incoherent red and colourless cells derived from the blood current, the latter of which remain stationary upon the affected texture, become slightly coherent, and discharge their protoplasmatous contents, the conformable or unconformable morphology of which determines the nature of the product and the sthenic or asthenic character of the disorder. The products of a conformable metamorphosis added to the pre-existing natural elements, constitute sthenic, curable and conservative inflammation. The products of an unconformable metamorphosis, whether irregular or retrograde, added to the pre-existing textures constitute asthenic inflammation.

The phenomena of scrofulous diseases also commence with an accumulation of incoherent cells from the same source, (the blood,) and it is by the products of the unconformable metamorphosis hindering their natural growth and supplanting the natural elements, that these diseases are produced.

ON A NEW AND SUCCESSFUL MODE OF TREATING FEVER.

By William Gill, M.D., Physician to the Nottingham Dispensary, and Consulting Physician to the Union Hospital, Nottingham.

(Read before the Provincial Medical and Surgical Association, at the Anniversary Meeting, at Derby, Thursday, August 5th, 1847.)

At a period when fever, to an alarming extent, prevails in our great manufacturing towns, I have much pleasure in bringing before the consideration of the members of the Association, a new method of treatment of fever, which is generally applicable, and has proved very effective. Twenty-five cases of fever occurring in our Union Hospital, during the last two months, have tested its power. This remedy is capable, not only of controlling some of the most distressing symptoms of the typhoid state, but *frequently* of arresting its progress, both at the commencement, and at a more advanced stage of the disease. Still a more extended experience is required before its merits can be fully determined. It is said, that very lately, in Liverpool, no less than 10,000 people were at the same time suffering from typhus fever, accompanied with a considerable mortality. Its attacks were not limited to the poorer classes, as many of the Roman clergy, and several in the higher ranks, have fallen victims to its power. In London, Glasgow, Leeds, Huddersfield, and Manchester, and other large towns, the same type of fever exists. Should the constitution of the atmosphere, during the autumnal season, prove favourable to its dissemination, may we not expect its wide spread in an epidemical form? In Liverpool, as in other large places, the introduction of typhus was traceable to the vagrant Irish. Its rapid diffusion may be easily accounted for, by their gregarious habits. Wherever they wander, a family of contagious disorders is carried with them. Small-pox, measles, skin diseases, and fever, were imported wholesale into the Union Hospital, by the droves of Irish driven by famine from their native land. The appearance of these unfortunates, especially the children, was wretched in the extreme, and told an unerring tale of hunger and suffering. Very soon typhus fever broke out, and raged with considerable severity.

Holding the appointment of Honorary Physician to the Hospital, I had a fair opportunity of trying a method of cure, the success of which had frequently reached my ears whilst living in Germany. I think it proper to mention that the hospital, in connection with the Nottingham Union, is a building well adapted for the treatment of fever, the rooms being lofty, and well ventilated, and kept very clean, and readily admits of the classification of patients. The diet is wholesome and liberal, and an intelligent medical officer, Dr. Stiff, has the management of the in-door sick. After the commencement of the mode of treatment to

be described, *every new case* was submitted to its influence—twenty-five in all. During the last three weeks only two fever-patients have been admitted.

Before entering more immediately on the object of this paper, it will be right to describe, concisely, the general features of the prevalent fever. Occuring, as it chiefly did, amongst the half-starved Irish, we might naturally suppose it would be characterized by symptoms of a low typhoid character. In most cases the *immediate* cause of the attack was traceable to sleeping in crowded lodging houses, the usual abode of fever in our large cities; the proximate causes, doubtless, were over fatigue, and insufficient and unwholesome food. The term "hunger pestilence," has been aptly applied to the disease. A true typhoid gastro-enterite, was present in many of the patients, closely resembling what so frequently is observed in the Parisian hospitals. Whether the essentiality of the fever existed in the condition of the muco-alimentary membrane or not, it is not my intention here to discuss. This, however, I remarked, that *so soon* as the signs of gastro-alimentary irritation were subdued, the signs of general fever subsided. Some two or three cases which I shall read, will corroborate this observation. In the generality of patients under my care, not only was the gastro-alimentary membrane affected, but also the muco-pulmonary, as evidenced by cough, shortness of respiration, and frequently universal sonorous râles, affecting the whole of the chest. In most of the Irish sick the skin was spotted with petechiæ, of different sizes and colours, chiefly developed on the abdomen and chest. This was not remarked amongst the English cases. There was no discharge of blood from the inner membranes. Œdema of the lower extremities occurring early in the disease was generally a fatal symptom, though we had two cases of recovery in boys, who were universally anasarcous from the commencement. The disturbance of the sensorium was marked by low muttering delirium, sometimes wandering about the bed-room, constant picking at the bed-cloths, and subsultus tendinum. Some were affected with a heavy, comatose, and stupid state, from which they were with difficulty aroused, and when aroused, with difficulty were made to understand questions; they relapsed immediately into the same lethargic condition when left to themselves. This comatose condition often continued till convalescence was established, and in some even later. It seemed a perfect prostration of all mental energy, and was only relieved as the bodily powers regained their tone. In no one case did active delirium occur. The secretions from the bowels were thin, frequent, black, and offensive, and often attended with severe griping, but no bloody discharges. The function of the bladder in one or two individuals was suspended, and it was necessary twice daily to use the catheter. The usual period of the termination of the fever seemed to be from the eighteenth to the twenty-first day, at which time the patients were left in a state of the greatest prostration. When the case terminated fatally, an unrousable unconscious coma closed the scene. The usual symptoms of fever were generally present,—as the hot dry skin; black tongue; urgent thirst; pulse varying from 90 to 130; insomnia; and pains in head, back, and limbs, &c. After this brief description of the general features of the disease, we will now proceed to the treatment.

I am well aware that a great prejudice exists in the profession against the treatment to be advocated, partly because it is opposed to preconceived opinions, and chiefly from the unprofessional manner in which it has been ushered into notice. I feel certain, however, that I am addressing a body of gentlemen willing to receive *truth* for the *sake of itself*, not looking to the source from whence derived, but only to its sterling quality. With perfect confidence, therefore, I throw myself on the candour and liberality of my professional brethren, whilst I detail a treatment of fever, as yet untaught in the schools, and unrecognized by the profession. If future experience shall confirm my own, as to its curative properties, it will be a source of gratification to myself in having been the first to bring its merits before this enlightened Association.

I believe that Dr. Currie, of Liverpool, was the first scientific English physician who enlisted cold water as an external remedial agent in the treatment of fevers. Successful as the practice was under his direction, how little has it been followed in later times! It is only within the last few years that the prejudice which existed against the internal and external use of water has begun to subside. Perhaps the prominence of the sanitary questions, and the many evils proved to arise from the want of a due supply of pure water, has had much to do in removing this groundless prejudice, and may have produced an undue re-action in its favour, causing it to be considered *not only* as necessary to a healthy condition, but as a *curative agent* of universal efficacy. Hence perhaps the public mind has been somewhat prepared to receive the hydropathic theory with much more favour than its intrinsic merits demand. An universal remedy will ever find many advocates, and in a numerous profession like ours, there are ever men to be found who, from selfish motives, will pander to this diseased taste of the public mind. We, as an Association, must ever protest against such exclusive theories as prevail in our days, being in our opinion unscientific, opposed to experience, and calculated to lead to incorrect views respecting the power of many known and valued medicinal agents. In making this protest against any exclusive theory for the cure of diseases, we must not rush into the opposite extreme, and from disbelief of their universal efficacy, deny their particular efficacy, *when* the touchstone of experience speaks to the contrary.

The plan which I have adopted for the cure of fever has been a modification of Dr. Currie's. Instead of pouring buckets of cold water over the body, I have enveloped it in a wetted sheet, an instrument more effective than Currie's in reducing the temperature of the body, and producing a warm and comfortable perspiration, which did not uniformly follow his plan. The fear of evil consequences from this treatment is groundless. I give no opinion as to its utility except in cases of fever. Here, however, I can speak with confidence. When the skin is burning-hot, and the mouth and tongue parched, the application of a sheet, wrung out of cold water, and applied *closely* to the whole surface of the body, and evaporation prevented by the application of three or four blankets placed over it, produces a most grateful feeling of refreshment, which is soon followed by a more or less warm perspiration. In young people this perspiration breaks out in from five to ten minutes after its application; in middle-aged people the period is longer. Many uncomfortable sensations are soon relieved by its use, such as the muscular pains in the back, thighs, and legs, and the sense of aching and weariness; the thirst often becomes less, and even the dry tongue sympathizes with the relaxing influence induced on the cutaneous surface. I have seen the low moaning delirium subside whilst under its use; and some patients who have not slept before, now doze, especially if the hair has previously been cut short, and a flannel night-cap wetted with vinegar and water been applied to the head.

The simple plan I have followed has been this:—On a flock bed I have placed from three to five blankets, superimposed over these a sheet wrung out of cold water, on which the patient, stripped, is placed, with legs outstretched, and arms to the side; the sheet is then drawn tightly around up to the neck, and inclosing the feet; first, one blanket, then another, and so on to the whole number, are tightly drawn over the sheet, so as to have the *whole body well and closely packed.* In this state the patient lies from a quarter of an hour to one or two hours, according to the object in view, and the effect produced. Some get tired at the end of half an hour, some can continue for one or two hours, and feel very comfortable. As soon as a gentle perspiration commences, a wine-glass full of water is given frequently. At the commencement of this treatment, in a case of fever, I have generally ordered its use for one hour; after that time the wet things are removed, and the sick person is placed in bed, well wrapped in three blankets, and allowed to perspire for three hours; afterwards, the blankets are to be carefully removed, one at a time, so as to allow the perspiration to subside gradually, and the patient is then placed in bed between the sheets.

During the whole of this period, small quantities of water should be given. In the summer, during this process, a free ventilation may be allowed in the chamber; in winter, it is necessary to have a good fire, and to have one blanket well warmed to apply around the body, so soon as removed from the wet sheet.

Several cases of incipient fever have lost all traces of disease after the first application. If the fever is not reduced, the next day the same plan must be repeated, keeping the patient in the wetted sheet from half an hour to one hour, according to the intensity of the symptoms, and in the blankets from one to two hours. This may be repeated every day till indications of *a cool* skin arise, then it must be immediately discontinued.

During some period of this treatment, the temperature of the atmosphere being very high, (75° to 78° in shade,) I have not found it advisable to keep the patient as long as two hours sweating in the blankets; from half an hour to one hour was sufficient. A longer period caused the pulse to be accelerated, instead of lowered, which latter is the usual effect of the treatment. In very hot weather, when a free perspiration has been induced at the commencement of the fever, I have adopted the following plan:—To wrap the sick person for half an hour in the wet sheet, covered lightly with one blanket; to be then washed all over with a towel wetted with tepid water, then rubbed dry, and placed in bed between the sheets. I have not found it necessary to make use of this treatment more than five times to the same individual; generally after the third or fourth application the skin becomes cooler, and the other signs of fever gradually subside. When the skin becomes cool, and the tongue less dry, I have instantly discontinued all water remedies, and given bark, wine, and broths, and it was surprising how soon convalescence and strength become established. During the whole course of the fever milk and water, or weak broths, were allowed, *ad libitum.* In one person, twice, in the course of the same day, owing to the intensity of the fever, it was found necessary to repeat the wet sheet, using it the second time for only half the period of the first; a comfortable night ensued.

Without doubt this is a most effective mode of *quickly* reducing the temperature of the body; an equilibrium is soon established between the cold of the water and the heat of the body, and the patient becomes bathed in a natural vapour bath, as may be felt by placing the hand under the bed-clothes. Where the fever runs high, and the delirium is violent, the wet sheet may be safely applied for short periods, (two minutes,) several times in the course of the day. This will be found a more effectual mode of reducing the cerebral excitement, than any other means with which we are acquainted. This refrigerating plan, used for ten minutes, during an evening exacerbation, will often produce a few hours refreshing sleep.

I must confess that I had great doubts as to the *safety* of this treatment, where the mucous membranes

of the bronchi and gastro-alimentary passages were complicated. Very soon my fears on this head were dissipated by the convincing evidence of experience; in fact, *these* proved the cases in which the decided benefit of the treatment was most marked. The quick and embarrassed respiration, dry cough, and sonorous râles, subsided quickly after one or two applications of the wet sheet; the cough became looser, the râles moister, and expectoration was established.

The same happy change also occurred where the gastro-alimentary membranes were disordered. Generally the first wet sheet puts a stop to the diarrhœa, and soon afterwards pain and swelling disappeared. A confined state of the bowels was frequently the effect of the wet sheet, and it was found necessary in several of the patients to resort to small doses of castor oil. In three or four cases the symptoms of gastric and abdominal irritation or inflammation were so violent, as to have justified the employment of leeches, calomel, and opium; and indeed we know that depletion by leeches is the usual treatment followed in the Parisian hospitals, and yet by the simple means mentioned, in three days every bad symptom had vanished. A great saving is made to the patient's strength when we can dispense with the abstraction of blood.

I am anxious to make this paper altogether practical, hence I will not enter into any theory respecting the *modus operandi* of the wet sheet. At some future time perhaps I may avail myself of our excellent *Provincial Journal* for such purpose.

And now, before I read some cases, a most important question suggests itself. Is it possible to arrest the progress of typhus fever after once fairly established? I am well aware that individual experience, and the testimony of our best writers on the subject, answer this question in the negative. It is therefore with great diffidence I oppose my experience against this concurrent testimony. *Facts* are stubborn things, and can only be contradicted by proving their incorrectness. My limited experience distinctly shows that, *fever in all its stages has been arrested.* If a more lengthened trial of this treatment should corroborate this simple statement, a pleasing addition will be made to our stock of professional knowledge, which may prove of considerable advantage to suffering humanity. I think it right to add that many of the patients in the Union Hospital were occasionally visited by professional friends resident in Nottingham, and were daily seen by the House-Physician.

I shall read a selection of cases in order that I may not unnecessarily occupy the valuable time of this meeting.

Case I.

Michael Kane, aged 18, Irish vagrant, of vigorous constitution. He has been in the Union Hospital five days, under the care of Dr. Stiff, and taken salines.

June 28th. The following is his present condition:—Supination in a lethargic state, and unconscious, unless violently aroused; the face purplish red; eyes blood-shot and pupil dilated; constantly picks at the bed-clothes; subsultus tendinum; low muttering delirium; the skin furnace-hot; tongue dry, shrivelled, black, and covered with sordes; diarrhœa; general tympanitis of abdomen, without much expression of pain when pressed, unless aroused, and then his face indicates the existence of pain; the urine and stools are not passed involuntarily; the abdomen and skin generally covered with dark-coloured petechiæ; the respiration hurried, forty-four in the minute, and the stethoscope reveals universal bronchitic râles in the chest; pulse 130, weak and hurried. The treatment ordered was the application of the wetted sheet for one hour, blanket for two hours; the head to be shaved, and a flannel night-cap, wetted with vinegar and water, to be constantly applied. To have milk and water *ad libitum*.

There evidently were clear signs of head, chest, and abdomen complication. The blood-shot eye and purple countenance, accompanying a nearly unconscious state, indicated a congestive condition of the brain. The stethoscope revealed a similar condition in the lungs, and the universal swelling of the abdomen, attended by diarrhœa, and by pain when the patient was partly sensible, added no little to cause a most unfavourable prognosis to be formed.

June 29th. The aspect is better; has passed a better night; the picking at the bed-clothes and the low muttering delirium are quite subsided; the skin is cooler and rather inclined to moisture; the purging no longer continues, and there is less tympanitis; breathing and dry cough less troublesome; respiration not so frequent when lying quiet, but the slightest movement causes it to be accelerated; the râles moister; the man more intelligent when aroused, but still instantly falls into a doze when left to himself; the tongue not so black or dry; the pulse come down to 100, regular and soft. He sweated much both in the sheet and blankets. To repeat the wet sheet and blankets as before.

30th. Continues better in all respects. No further application of the wet sheet.

July 1st. The man is convalescent; skin cool and moist; tongue has nearly lost all marks of dryness and blackness; urine free and paler coloured; bowels open once daily; intelligence nearly restored; pulse 90; the chest and abdominal complications rapidly subsiding; the patient asks for nourishing diet. To have the bark, mutton broth, and bread and milk.

July 4th. To have meat daily.

5th. Is able to walk in the room.

6th. Is down stairs in the yard and well.

Case II.

Martin Glynn, Irish vagrant, aged 13, has been ill three days.

June 9th. There is intense heat of skin, and flushing of the face, with pains in the head, bones, abdomen, back, and legs; great thirst; tongue deep red, and covered in the centre with a cream-coloured fur; great pain in epigastrium, and a tympanitic condition of the abdomen, with diarrhœa; there exists slight cough, but no

râles in the chest; the tongue is tremulous, and subsultus tendinum is present; no sleep; pulse 110, rather sharp; urine scanty, and high-coloured.

To have the wet sheet for one hour, and blankets for three hours. Milk and water to drink. The abdominal complication was most marked in this case—*a true typhoid gastro-enterite.*

10th. Continues in many respects the same; the diarrhœa, however, has subsided. Was ordered a repetition of the treatment, and the vinegar and water lotion to the head.

11th. Says he is better to-day; the skin is cooler, and inclined to moisture; face very little flushed; tongue becoming less dry and red; headache better; no pain in epigastrium or abdomen; bowels confined; urine free, and paler; less thirst; pulse 110, but not so sharp. To repeat the wet sheet as before.

12th. Convalescent; slept the whole of the night, and makes no complaint this morning, except of weakness. Face cool; headache gone; tongue clean and moist; urine free; pulse 64, very soft; appetite returning. To have mutton broth, and bread and milk.

13th. To have rice pudding and meat.

16th. Is able to walk in the yard, and may be considered well.

Case III.

Thomas Gafen, Irish, aged 14, of healthy habits, ill for three days.

July 8th. Face flushed and anxious; skin very dry and hot; tongue of a vivid red, and in the centre covered with a dirty cream-coloured fur, becoming dry and black in places; great thirst; throbbing pain in the head, epigastrium, and limbs; pulse 120, wiry, and small; considerable tenderness in epigastrium; gurgling in iliac region, accompanied with diarrhœa; the respiration hurried; frequent cough, and universal sonorous râles in the chest; no sleep; urine scanty. Was ordered the wetted sheet for one hour, and blankets for two hours. Hair to be cut short, and the wetted cap applied. Milk and water to drink.

9th. Continues in all respects the same, except that the skin is somewhat cooler.

10th. Wonderfully better; slept much in the night; aspect natural; no heat of face or skin, which is inclined to moisture; tongue moist, and losing its fur; very slight thirst; urine free; bowels open twice since the 10th, and has lost all pains in the head and epigastrium; pulse 76, soft. No further application was ordered.

On the 14th the boy was allowed to sit up, and have meat, and was considered convalescent.

May we not draw the following conclusions from the facts adduced:—

1. That the judicious use of the wet sheet has a powerful influence in relieving many of the most distressing symptoms of fever.

2. That if applied *very early* in the disease, it may in some cases arrest its further progress.

3. That if used *later* in the disease it has a controlling influence, bringing the fever to a termination much earlier than by any other known treatment.

4. That the ordinary *complications* of fever are no arguments against, but rather for, its use.

5. That with this treatment, weak broths and milk and water, *ad libitum*, may be allowed.

6. That the first symptoms of the subsidence of the fever, were a cool and often moist condition of the skin, a diminution of thirst, and an improvement in the tongue. When these changes occur, the treatment must directly be discontinued, and bark, and better diet be ordered.

7. That some of the worst cases of typhus fever were convalescent and walking about on the fifteenth day from the commencemennt of the attack.

HISTORY OF TWO CASES OF POLYPUS UTERI.

By Edward John Spry, Esq., Truro, Surgeon to the Royal Cornwall Infirmary.

(Read at the Annual Meeting of the South-Western Branch of the Provincial Medical and Surgical Association, held at Truro, July 16th, 1847.)

Case I.

M. A. K., aged 43, was admitted into the Infirmary, on the 28th of January, 1847, as a case of menorrhagia, under the care of Dr. Carlyon. She is the wife of a mason residing at Redruth, and the mother of nine children. She says that she enjoyed good health until two years since, when irregular vaginal discharges commenced, accompanied with pain in the back; that about nine months since she was seized with a violent pain in the abdomen, which obliged her to keep her bed for some time, during which she was attended by Mr. Roan, who told her that she had "a gathering in the womb;" that she has since had every few days a profuse, sanguineous, and purulent discharge; that she has found no relief from medicine, and that lately the discharge has been almost entirely sanguineous, and occasionally so profuse as to cause fainting.

February 2nd. Dr. Carlyon being absent, the case fell under the management of Dr. Barham, who, this morning requested me to examine the patient, as he suspected the existence of a polypus, so called. The discharge of blood had been excessive during the night; her countenance was very sallow; pulse 100. I found a large tumour occupying almost the whole of the vagina, attached to the uterus, within the cervix, and although I could not avail myself of Dr. Simpson's valuable uterine sound, I satisfied myself that there was no inversion, and that the tumour grew from the left side of the uterus, midway between the fundus and cervix, in which investigation I found a stout bougie a very useful aid.

12th. At Dr. Barham's desire, I applied a ligature to the neck of the tumour with the double canula, which procedure occasioned little or no pain. The hæmorrhage, which, from the patient's account, was sufficient to fill an ordinary chamber utensil in twenty-four hours, ceased from that moment, and did not return up to the time of her leaving the Infirmary,

which she did, on the 12th of March, in good health. The ligature was tightened daily, and I found it loose in the vagina on the seventh morning after the operation. The tumour is pyriform, of a very firm structure, but very vascular, and almost as pervious as a fine sponge, its lower surface has ulcerated, and the edges of that hollowed surface are flocculent.

Case II.

Mrs. H., aged 42, mother of three children, had been in very good health until about three years since, when she began to be irregular, and for the last two years has been subject to very profuse uterine hæmorrhage. I saw her for the first time on the 22nd of April, of the present year; she was then very pale and sallow, and exceedingly weak from the almost continuous hæmorrhage that was going on. She complained of great pain in her back, and a sense of weight and pressure in the hypogastrium. Suspecting the existence of a morbid growth from the uterus, I induced, her after a visit or two, to submit to an examination, when I discovered that the vagina was nearly filled with a large fibrous tumour, which bled freely under the gentlest pressure. Considering that there was no room for delay, I proposed a consultatiou with my friend Dr. Barham, who, concurring in opinion, as to the character of the tumour, and the seat of its attachment, (just within the os tincæ,) on the 30th of April I passed a ligature round it, as high up as possible, by the aid of the double canula, as described by Nissen, in "Richter's Anfangsgrunde." The application of the ligature, as in the former case, occasioned little or no pain; it was tightened daily, and on the morning of May 8th, I found the tumour detached. No hæmorrhage ensued from the first application of the ligature, nor has any returned to the present time.

Tremendous hæmorrhagic action came on, causing violent congestion of the head, lungs, and heart, and finally, of the abdominal viscera, which required to be met with suitable remedies, including the application of several dozen of leeches, and one venesection. The blood drawn contained very little crassamentum, and the patient informed me, that having accidentally cut her finger a few weeks before I saw her, a fluid escaped, almost colourless, from the wound. She has recovered, however, sufficiently to walk out, and being in the neighbourhood this morning, July 16th, I found her free from any urgent complaints. She told me that she had been unwell twice since the operation, at regular periods, and that she was entirely without any sanguineous or muco-purulent discharge.

[These cases were illustrated by preparations.]

CASE OF EXTRA-UTERINE FŒTATION WITHIN THE FALLOPIAN TUBE, FATAL BY RUPTURE AT THREE MONTHS OF GESTATION.

Reported by Spencer Cobbold, student at the Norfolk and Norwich Hospital, and pupil of John Green Crosse, Esq.

On the 10th of last December, Mr. Crosse was first summoned to Mrs. K——, who was suffering from severe pain about the right iliac region, accompanied by general debility and slight constipation. Seven days before, she received medical aid from Mr. Spencer, who described her symptoms as those of great prostration, with a remarkably slow and feeble pulse, in fact, incipient syncope. It appeared almost evident to Mr. Spencer that she had lost blood, but having made diligent inquiry to that effect, he could in no way account for these formidable symptoms. Opium and æther combined were administered, and she had rallied considerably by the following day. The local pain first described was somewhat relieved by the application of two small successive blisters. The constipation yielded to gentle aperients, and at the end of a week medical services were discontinued. A few days subsequently, however, a relapse of the former symptoms prevailed, the costiveness presenting a more prominent feature in the diagnosis. The Oleum Crotonis, taken internally, here readily produced the desired effect, and little or no further treatment appeared necessary.

On the 3rd of January, at 9 p.m., after sitting up for several hours, the patient was suddenly seized with severe pain in the right iliac region, and sank rapidly, expiring after a period of two hours.

Autopsy forty hours after death.—The first feature of interest was the great distension of the abdomen, and the general exsanguine appearance of the corpse. The peritoneal cavity was loaded with dark, and chiefly coagulated, blood, (seven or eight pints at least.) As the investigation proceeded, a tumour was at length discovered in the right iliac fossa, (barely the size of a cricket ball,) the external surface having a delicate greenish hue, and the whole being semi-transparent, allowing a fœtus to be distinguished floating in a quantity of fluid. After separating the coagula from it, one third of the mass was observed to be enveloped by a cyst, the whole resembling in a great degree the universal ball and socket-joint; the pouch answering to the socket was evidently a part of the Fallopian tube, which had been enlarged and distended in so enormous a degree, by the contained and increasing fœtus and membranes, that at length it ruptured, giving rise to the hæmorrhage.

An elaborate and tedious dissection now followed; a ligature was applied to the vagina to prevent drainage, and the uterus and part of the vagina, together with the tumour, were removed *en masse*. The uterus was a little larger than in the unimpregnated state, and its inner surface was coated with a semi-gelatinous deposit, which could be easily scraped off with the handle of the scalpel; this deposit was about an eighth of an inch in thickness, and was all that the uterine cavity contained. The distended tube, after rupturing, had contracted at its base, so as to effect in part the expulsion of the fœtus and its membranes. In the right ovarium the corpus luteum was observable on section; no other change was remarked, excepting that its bulk was greater than that of its fellow. The passage between the cystic portion of the tube and the uterus was found impervious and obliterated. The left ovarium and Fallopian tube had undergone no perceptible change.

Norwich, July, 1847.

CASE OF DELIVERY UNDER THE INFLUENCE OF ÆTHER.

By Henry B. Pickess, Esq., Surgeon, Aylesbury.

Ann Ricketts, of Aylesbury, aged 38, was taken in labour, on Tuesday, August 24th. The midwife in attendance stated that the pains were sharp and frequent for six hours, when the membranes ruptured, and the pains immediately ceased, and only occasionally recurred, until about forty-eight hours afterwards, when the midwife requested my attendance. I found her in active labour, pains strong and frequent, the os uteri well dilated, soft and flaccid, with the head favourably situated. At the expiration of about two hours, on making another examination, I found the hand presenting through the os externum, the shoulder, down to the outlet of the pelvis, and the right side of the thorax compressed within its cavity. I then endeavoured to turn the child, but was unsuccessful, owing to the strong expulsive efforts of the patient. A full opiate was then given her, and I requested the assistance of my friends, the Messrs. Ceely.

In about half an hour those gentlemen arrived, and in consultation it was agreed that under the circumstances, the duration of the labour, the wearied state of the patient, with declining pains, it would be desirable to put her under the full influence of æther by inhalation, previous to making another attempt at turning.

The process and its object being fully explained to the patient, she readily assented, and adroitly performed her part, under the superintendance of Mr. R. Ceely. In seven minutes the full effect of æther was manifest, and the operation of turning was commenced by Mr. J. H. Ceely. On introducing the hand into the vagina, that and the os externum were found more flaccid and dilatable than before, and the hand and arm were readily returned. The head was ascertained to be above the brim of the pelvis, with the chin resting on the os pubis, the feet on the back of the child, and consequently out of reach. A finger being introduced into each ham, the legs and feet with some difficulty, were at length brought down in succession. During this stage of the process, the uterus firmly contracted on the hand of the operator. The child being manifestly dead, the extraction of the head being impeded by its position and the contraction of the uterus, the delivery was completed by the introduction of the forceps. In a few minutes the placenta was expelled without hæmorrhage, and the uterus found perfectly contracted. The time occupied in effecting the delivery was about seventeen minutes, and during the whole of this period, the patient was nearly motionless and perfectly unconscious. The inhalation of æther was wholly suspended about every three minutes, from the occurrence of stertor, which, however, was of short duration. In five minutes after the conclusion of the inhalation, the patient recovered herself, but for a time, she was incredulous of what had occurred, and when convinced, manifested equal surprise and delight, repeatedly affirming that she had been unconscious of all that had passed.

The assistance afforded in this case by the use of æther-inhalation, was marked and decisive, by the perfect unconsciousness and passive condition of the patient to the otherwise painful and difficult process of turning, although the uterine contractions were energetic during the whole process. The patient speedily recovered without a single adverse symptom.

Aylesbury, September 5, 1847.

ON SIMPLE ACUTE INFLAMMATION OF THE MEMBRANES OF THE BRAIN IN INFANTS.

By Dr. Rilliet, of Geneva.

(Translated for the Provincial Medical and Surgical Journal.)

(Continued from page 236.)

V. Termination: Prognosis.

Acute meningitis in infants may have the following terminations:—I. In death. 2. In recovery. 3. In the transition to a chronic condition.

Of these the first is unfortunately by far the most frequent. Some authors consider that this form of the disease is less fatal than the tubercular form, but we know of no good authority for the assertion. If indeed the absence of the tuberculous element in this form of the disease and its occurrence in a previously healthy constitution might reasonably give us some hope of combating its progress with success, there is on the other hand to be taken into account, the violence of the inflammatory condition, and the rapidity with which cerebral disorganization is induced.

That there is, however, some ground for hope in the sporadic form of the disease, is fairly to be anticipated, since even when the disease is epidemic, some recoveries occasionally take place. In looking over the works on meningitis by Golis, Charpentier, and others, we do sometimes meet with instances in which real meningitis has been cured, although we regard the generality of the cases reported as cured, to have been instances of erroneous diagnosis. [In this remark we perfectly agree with the author, it has happened to us not seldom to have met with vaunted cases of hydrocephalus cured, which have in reality been nothing more than infantile remittent, with cerebral complication. *Trans.*]

It is no easy matter, if not quite impossible, to give anything like a scientific prognosis in this disease. Facts are wanting, and the disease must be re-observed. Independently of the termination in death, and in recovery, some authors consider that the inflammation may pass into a chronic state. We acknowledge that this may possibly be the case, but we do not know of a well-authenticated instance. In our experience, whenever there has existed a chronic or sub-acute inflammation of the membranes of the brain, it has been so from the commencement, and has been in the instance of a tuberculous subject,—a case in fact, of tubercular meningitis, and not of simple inflammation. In those cases in which the appearance of false membranes has led some authors to believe in the existence of chronic simple meningitis, we, as we have elsewhere stated, (*Traité des Maladies des Enfans,*) consider

the lesions to be the result of a former meningeal hæmorrhage.

VI. Causes.

The causes of meningitis are not otherwise than obscure, as might indeed be expected, when we consider the comparative rarity of the affection, and the imperfection in the history of infantile cerebral affections in general. Most authors agree in the great preponderance of the tubercular form of the disease over that which we have denominated the simple acute form, but they differ respecting the age at which this latter most commonly makes its attacks. Guersent, for example, states that in early infancy it is more common than the tubercular form. Bouchut affirms the direct contrary. In analysing a certain nnmber of cases during the composition of this essay, we have ascertained, that simple acute meningitis may attack children of all ages; but that it is especially frequent in the first and ninth years. This is shown in the subjoined table:—

	Cases.	Primary.	Secondary.
1st year	5	5	0
2nd to 5th	4	2	2
6th to 10th	13	11	2
10th to 15th	3	1	2
	25	19	6

It would appear from this table, that dentition has an intimate etiological connection with the disease, as it is most frequent at the periods of eruption of the first and second dental series.

Robust children are those most commonly the subjects of this disease, at least as far as our observation goes; and boys appear to be more prone to it than girls. According, however, to the experience of others, the influence of sex is not perceptible.

Meningitis may occur in all seasons, but a larger series of observations is necessary in order to determine whether it is more frequent at certain times of the year than at others. The distribution of the cases which form the basis of this memoir was as follows:—

January	1	July	0
February	2	August	2
March	1	September ..	2
April	1	October	4
May	4	November ..	1
June	2	December ..	3

It does not appear therefore that the disease is especially prevalent in hot weather, though it is incontestably occasionally produced by insolation. M. Guersent alludes particularly to this cause:—"The prolonged exposure to the sun's rays is," he observes, "one of the most common causes of acute meningitis, especially in very young children. I have many times had proof of this, and particularly in one instance, in which an infant which had been left exposed to the mid-day sun in the garden, died of most extensive meningitis of the surface of the brain and cerebellum."—(*Dict. de Med.*) Dr. Whitehead also attaches great importance to the influence of insolation. According to him it is the most potent of all the causes of the disease.—*Medical Gazette*, Jan., 1844.

Among the occasional causes of acute meningitis, is the repercussion of eruptions of the scalp; among the cases which we have met with, the majority were either the subjects of, or had recently been cured of eczema, favus, or impetigo.

Direct causes, such as blows, &c., may induce meningitis in infants, as in persons of greater age. Parent gives the case of a child of ten years of age who died of meningitis, the consequence of fracture of the orbital plate of the frontal bone; such instances are however rare.

VII.—Treatment.

What we have said respecting the causes of acute meningitis applies still more forcibly to its treatment. We are not able, in the present state of science, to point out the most successful means of arresting the progress of the disease. The treatment is *prophylactic* and *curative*.

1. *Prophylactic Treatment.*—The hygienic rules which we have elsewhere insisted upon, in reference to tubercular meningitis, are only partially applicable to the disease in question. Instead of the tonic medicines, so applicable in the tuberculous constitution, it is necessary, in the probable subjects of this disease, to advise a cooling and slightly antiphlogistic regimen. The bowels should be kept free, and care should be taken to maintain an equable temperature in the extremities; the hair should also be kept short and thin, so that the head may be cool; and lastly, tepid baths should be frequently administered.

As we have no intention to write an article on hygiene, we shall content ourselves with these general rules; but while upon the subject, we think it right to allude to the precautions which are necessary in treating the chronic-scalp eruptions of children.

When the cutaneous inflammation occupies but a limited surface, it may in general be cured without risk; but on the contrary, when the diseased surface is extensive, the rapid denudation of the inflamed skin, by a removal of the scabs, may be followed by the worst consequences. Whatever be the explanation of this, the fact remains certain. Common sense then indicates, that in order to avoid danger these scalp-eruptions must be treated with caution, and as the injurious effects seem to be proportionate to the extent of the denuded surface, it is advisable to treat but a small portion at a time, and to encourage free action of the bowels as a derivative.

2. *Curative Treatment.*—Acute meningitis, as the most formidable inflammatory affection to which infancy is subject, requires an energetic treatment. The indications to be fulfilled are both general and special. Among the former we may mention—1st, active antiphlogistic treatment; 2nd, to favour the absorption of effused products; 3rd, to replace the antiphlogistic treatment by one vigorously derivative, during the period of collapse; 4th, to guard against all nervous excitement.

The special indications have reference to the exciting cause of the disease, and thus the treatment must vary accordingly as it succeeds to the rapid declension of a cutaneous affection, or assumes the convulsive or phrenitic form, or appears sporadically or epidemically:—

1. *Blood-letting.*—Authors are not agreed as to the propriety of abstracting blood in tubercular meningitis, but in the acute form there can be no question of its advantages. In young infants, leeches are to be preferred to general bleeding; but in children of the age of four years, bleeding at the arm is the best. When leeches are determined upon, they are to be applied in numbers proportionate to the age of the child, either to the head or to the extremities, as the circumstances of the case may appear to require.

2. *Cold Applications, Blisters, &c.*—Heim is one of the first physicians who employed cold affusion in meningitis, and appears to have placed such confidence in this measure as to be indifferent to the employment of others. The plan was to pour cold water upon the head for ten minutes in every hour.

[The author here enters into a long account of the different modes of applying cold, but as they are in common use, we need not occupy our pages with their description. The author himself gives the preference to a mode of irrigation, which consists in conducting water guttatim by means of a skein of thread, which is made to hang from a vessel of water over the head.]

Cold applications are only useful in the early stages of the disease; all authors without exception condemn them as hurtful when coma supervenes. Some writers then recommend the substitution of warm applications, and Romberg more especially approves of them; Guersent also speaks favourably of their use when there is little heat of head. We have no personal experience of this matter, but should question their advantage. A measure in which we have more confidence is the application of warm stimulating fomentations to the extremities.

The employment of blisters must next occupy our attention; writers differ somewhat as to the period most suitable for their use. Charpentier advises them from the beginning, and applies blisters to the legs within some hours of the commencement of the treatment; if no amelioration follows these, he then applies others to the thighs or abdomen, and again later, to the nape of the neck.

There is one case in which we must not omit to induce vigorous counter-irritation of the scalp,—namely, in those instances in which the disease has supervened upon the retrocession of a cutaneous eruption. In these cases, blisters to the scalp, or frictions with croton oil, are strongly indicated; we give the preference to the latter, and could relate cases in which it has been followed by the best effects.

Purgatives.—We have no great faith in this class of medicines, but, on the contrary, have seen reason to believe, that by exciting intestinal irritation, they diminish the chances of recovery, without in any measure removing the original disease; nevertheless it must be stated, that Abercrombie, Deloyen, and others, regard purgatives as a valuable addition to the treatment of meningeal inflammation.

Alteratives.—The rapid progress of acute meningitis,—the early formation of morbid effusions,—the predominance of fibrine in the blood,—all indicate the employment of those medicines which promptly and effectually modify the crasis of the blood, and at the same time encourage the absorption of the effused products.

Mercury, in whatever form it is employed, should not be exhibited until after blood-letting, local or general. Some difference of opinion exists as to the dose which is most suitable. Golis prefers small doses, as the fraction of a grain; others, and more particularly the British practitioners, give it more liberally. Mercurial frictions are to be preferred to the internal administration of the mineral, as less likely to excite formidable intestinal symptoms.

Of late years the preparations of iodine have been well spoken of, especially in the period of collapse; we have had small experience of their effects in acute meningitis, but have found them quite imperative in the tubercular form of the disease.

Having thus gone through the principal remedies, we shall, in conclusion, lay down the following *resumé* of our practice, in the different forms of the affection:—

1. In the case of a robust infant, seized suddenly, or after a restless night, with violent and repeated convulsions, the child being comatose during the intervals, with squinting, contracted pupils, quick pulse, and respiration, if no cause can be assigned for the attack, we adopt the following line of treatment:—

One or more applications of four leeches to the knee; large cataplasms to the extremities, frequently renewed; cold applications to the head.

If the convulsions persist after the lapse of twenty-four hours, and the coma is not less during the intervals, leeches must be again applied, and irrigation be substituted for the cold lotions. Calomel is to be given internally, and mercurial ointment rubbed into the axillæ and thighs. If the child becomes pale, the pulse full, and the convulsions are less frequent, the continued application of cold must be suspended. If confirmed coma supervene, blisters may be applied instead of the cataplasms, these being kept on only sufficiently long to redden the skin, and then moved to another spot. The calomel may now be replaced by the iodide of potassium.

[In the management of the above case, there appears to us one great omission,—viz., the non-performance of lancing the gums, with the exhibition of enemata. As it is next to impossible in the first instance to diagnose centric from eccentric convulsions, the latter treatment should, in our opinion, always premise the more severe measures above indicated.—*Trans.*]

2. In a young child, of one or two years of age, of strong constitution, who is seized with fever, with continual somnolence, and accelerated pulse and breathing, without pulmonary lesion; with a fixed stare, frequent acute cries, repeated vomiting, and constipation; if it has not been exposed to the contagion of fever, and dentition proceeds normally, the practitioner should suspect the onset of acute meningitis, and prescribe leeches and cataplasms, and then wait awhile. If the symptoms persist, he must follow out the treatment above mentioned.

3. Suppose a child aged seven or nine years, of good constitution, after exposure to the sun, is taken with fever and headache, vomiting repeatedly, and is agitated

and complains of the light; if there is no history of typhoid fever, phrenitis should be suspected and blood be taken from the arm. If the symptoms diminish, but again increase in intensity, it is probable that the disease has an intermittent character, and quinine may be exhibited by the mouth and in an enema. But if to these symptoms, delirium or coma be added, and the disease has not passed the second or third day, active treatment must still be persevered in. The bleeding is to be repeated, or leeches to be applied to the mastoid processes, cold applications are to be continually applied, and if there be no vomiting, and the bowels are obstinate, croton oil may be given. If, however, the vomiting be urgent, we should endeavour to allay it by a quarter of a grain of bismuth, given every half hour. In addition to this, mercurial ointment must be energetically rubbed in. This treatment is to be carried out during the second and third day. If, however, the pulse becomes feeble and irregular, the face livid, and the pupil dilates, the hydriodate of potash should be given and blisters applied.

4. In the secondary and more insidious form of the disease, it is prudent not to abstract blood. A sedative treatment offers the greatest chances of success.

(To be continued.)

SEVERE CASE OF SPASM, ARISING PROBABLY FROM BREATHING AND SWALLOWING THE DRIED PARTICLES OF THE PEA-BLIGHT.

By Edward Daniell, Esq, Newport Pagnell.

(Communicated to the Provincial Medical and Surgical Association, at the Anniversary Meeting, at Derby, Thursday, August 5th, 1847.)

Thomas Coley, of Stoke Goldington, Bucks, a farm-labourer, returned from his work apparently in good health, about seven o'clock last night, August 2nd. He had been employed during the latter part of the day in a barn, unloading peas, which had been early cut in consequence of the blight; in fact, the peas were nearly destroyed by swarms of the black *aphis*, by which the peas and beans are greatly affected in this neighbourhood. The dust produced by unloading and stacking in the barn was very considerable; in short, the atmosphere he inhaled, and the saliva he swallowed, must have been impregnated to a vast extent with decayed particles and excrementitious matter from the dead bodies of these insects. He had his usual quantity of beer, which amounted in the course of the day to one quart and half-a-pint. Of what his food consisted I was not informed.

About eight o'clock he was seized with severe pain in his bowels, which gradually increased in severity until the whole abdominal muscles swelled and enlarged, becoming tense and hard, like pressing upon a board. The spasmodic action then extended to the chest, which became equally rigid, accompanied with difficulty of breathing. In less than an hour from his first seizure the paroxysms of pain became so severe that it required four strong men to hold him, he rolling upon the floor in the most intense agony, and breathing with much difficulty, accompanied by a noise, as though it required vast muscular effort to fill the lungs at all. His feet and hands were cold, and his body covered with clammy perspiration.

When I saw him, which was not until two hours and a half after the seizure, he was sitting on a chair, with his body bent forward, forcibly pressing himself against a table, occasionally writhing and groaning incessantly, still breathing with great difficulty. I believe he both heard and understood my questions, but was unable to answer them, or even to articulate in the least. The pupils of the eyes were perfectly dilated, and the pulse exceedingly feeble. The extreme hardness of the abdomen had been relieved when I arrived, probably from the unloading of the *primæ viæ*, for it appeared a few minutes before he had passed a copious loose stool, so extremely offensive that it was removed immediately, and I had no opportunity of seeing it.

The case assumed so anomalous a character, that I became impressed with a belief that it arose entirely from the poisonous property of the particles of the dried *aphis* or pea-blight, with which the atmosphere he had breathed had been so fully charged; and considering it likely, as the harvest advances, there may be other cases present themselves equally anomalous, it occurred to me that it might not be unworthy the attention of the members of the Provincial Medical and Surgical Association, now assembled at Derby.

I administered ten grains of calomel and two grains of opium in a pill. I then left the patient for half an hour, after having first directed his feet to be bathed in warm water, and the abdomen to be fomented with flannels, dipped, and wrung out, in water as hot as he could bear it. On my return he was relieved; consciousness and articulation returned. Prescribed an active aperient, composed of sulphate of magnesia and jalap.

Aug. 3rd. This morning a messenger was dispatched to me to say he continues better, but has had no action of his bowels. Ordered pills of calomel and croton oil.

The pills of calomel and croton oil produced very copious action upon the bowels, and entirely removed the painful symptoms under which the patient laboured. He was able to return to his work in three days after the seizure.

A few days after this case, I made enquires of the farmer whether any of his other men were at all affected who had been employed in carrying or housing the peas. I found that another man was so unwell the next day that he was unable to resume his work, but the case passed over without medical treatment. The farmer himself was slightly affected; he complained the same evening of severe pain in the stomach and bowels, and (as is usual with such men,) had recourse to stimulants to relieve it. He took, before going to bed, two tumblers of hot brandy-and-water, and found himself well in the morning.

It would appear from these cases that the dried particles of the pea-blight, when mingled with the saliva and swallowed, or breathed into the lungs, particularly in a close place like a barn, where the currents of fresh air are but slight, produce effects upon the

system analogous to certain poisons, influencing mainly the nervous system. In Coley's case the functions of the brain were decidedly disturbed, as was evidenced by the dilated state of the pupil, and the severe convulsive action, not only of the abdominal muscles, but of the muscles surrounding the pharynx and larynx, the latter being compressed to suffocation, and the power of articulation becoming consequently suspended.

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, SEPTEMBER 22, 1847.

It is with feelings of a very painful character that we feel ourselves again called upon to remark on the fatal course of the fever which still continues to prevail in Ireland, and in many parts of this country. It cannot but have been noticed, that each successive number of this Journal records the loss of promising members of the profession, cut off in the prime of life, domestic ties severed, and their families, too, often left entirely unprovided for. In a contemporary journal, the *Dublin Medical Press*, of the 8th instant, we read the following testimony to Dr. George Vickers Dunne, one of the victims of this fearful visitation:—

"Dr. Dunne was in the prime of life, and had just laid the foundation of a successful, honourable, and useful career; he had secured the esteem of many attached friends; he had established for himself a high reputation; and was in the enjoyment of complete domestic and social happiness. * * * * While at Maryborough he won the respect of all classes by his many amiable qualities; and for his unwearied attendance upon the sick-poor of the town and neighbourhood, he will long be remembered with the liveliest gratitude. At Errill, his late residence, his skill, humanity, and attention, caused him to be generally beloved. He was kind and courteous in his demeanour, generous and confiding in his attachments, and sincere in his friendships. His loss will be deeply felt by that district, which had become fully aware of the value of his services; and particularly by the humbler classes, to whose assistance he devoted the utmost attention during the late calamitous season, when the duties of the profession were doubly arduous."

And this is a record which we feel assured, with some variation in circumstance, will apply more or less to a very large majority of the medical officers, whether in Ireland, Scotland, or England, who have been in like manner sufferers from the contagion of the "famine-fever."

From researches instituted by Professor Cusack and Dr. Stokes, it would appear that, in ordinary times, nearly one half of the medical practitioners in Ireland suffer from fever, and that the medical profession of that country is more than decimated by its ravages. The soldier in time of war is less certain of entering battle, than is the Irish physician of being attacked by fever; while the prospect of ultimate escape with life is greatly in favour of the former. What the actual mortality among medical men, from the "famine-fever," may have been, we have no means of ascertaining, but there is every reason to fear, that the deaths which have taken place greatly exceed in number those which have been recorded.

The subject is one which challenges inquiry, for there can be no question that a great public debt is owing to the families of those who thus devote themselves to the general good, and that although nothing can compensate to the surviving widows and orphans, it is at least in the power of the Government to preserve them from utter destitution, and to allow them such support as may enable the widow to live in tolerable comfort, and to bring up her children in decency and in respectability.

There are two points which urgently press for consideration as regards the state of the medical staff in the public management of these fever institutions. To one of these we have just briefly alluded,—the making of some public provision for the families of those who fall a sacrifice to fever in the discharge of their official duties. The other is the still more important point of endeavouring, as far as possible, to prevent the occurrence of such sacrifice.

"That medical men," well observes our Dublin contemporary, "must encounter the danger attending the treatment of persons labouring under typhus fever, we of course admit, but we deny that they are to be wantonly exposed to this danger in a tenfold degree from negligence, mismanagement, and parsimony." And shame it is to the authorities, whoever they may be, public or private, that any meritorious officer should be subjected to the certainty of becoming infected with malignant disease by the want of all fitting arrangemnents in the receptacles appropriated to those suffering from it. The fever-hospital, in which Dr. Dunne endeavoured to administer relief to the miseries of the poor people around him, consisted of the "mud walls of an old cottage, eked out with boarding, and covered with straw;" and in this wretched shed nearly sixty persons were crowded together under treatment at the time he contracted the fever of which he died. The shed was, it appears, constructed by himself, unprovided with the necessary funds, out of the only materials which

he could command. This, however, is but one instance of what is in general operation throughout Ireland, for we are informed that there are "some three or four hundred of these temporary pest-houses," scattered throughout the country, "with a corresponding number of medical practitioners in charge of them." The arrangements in this country also have been by no means perfect in their kind, for which Liverpool might be appealed to as an example, and many valuable lives have been even here unnecessarily sacrificed in consequence.

Into the question of what is necessary to be done towards remedying such a state of affairs, it is not in our power to enter on this occasion, but this one point we would seriously impress, that whenever such a calamity as has lately visited us, makes its appearance, whether it be in England, Ireland, or Scotland, there it should be promptly met; for independently of the common tie of humanity, the claims of long and closest intercourse, of friendship, and family connection, which unite, or should unite, the inhabitants of these countries into one true brotherhood, we may rest assured that one cannot suffer without the others suffering also, and that the contagious disease which privation and destitution generate in the cottage, will assuredly spread to the mansion, and thence also carry off its appointed victims.

Reviews.

A Treatise on the Structure, Diseases, and Injuries of the Blood-Vessels, &c. By Edwards Crisp, M.R.C.S., &c. &c. London: 1847. 8vo. pp. 354. Plates.

We have great pleasure in commending to the notice of the members of the Provincial Association this excellent work of one of our Associates. It had already received the approbation of the Royal College of Surgeons, as the essay to which the Jacksonian Prize for the year 1844 was awarded, but has since been revised and extended, so as to render it more complete as a treatise on the subject to which it refers, and consequently more worthy of the attention of the profession. After a short chapter on the structure of arteries and veins, we are successively led to the consideration of the morbid conditions of arteries, under the several heads of arteritis, arterial deposits, diseases of the aortic valves, of the pulmonary artery and its valves, abdominal pulsation, aneurism and its varieties, dilatation of arteries, ulceration, rupture, and wounds of arteries. The diseases of veins are then treated of, including phlebitis, phlegmasia dolens, obliteration and obstruction, dilatation of veins, varix, hæmorrhoids, ulceration and wounds of veins. A chapter is added on the admission of air into veins; and there is also an appendix on the structure and diseases of the blood-vessels of the lower animals. These subjects are illustrated with numerous cases, many of which were witnessed by the author; and scattered throughout will be found much interesting statistical information, and several valuable tables,—in particular a table of 551 cases of spontaneous aneurism, selected indiscriminately from the British medical periodicals, from the year 1785 to the date of publication.

We quite agree in the opinion which has been expressed, that the utility of this table is greatly lessened for reference for statistical purposes, by the want of all arrangement of the cases, but we are nevertheless obliged to the author for having thus brought together, under one view, a mass of valuable information, which the exercise of a little patience and the expenditure of a little time will enable any one to consult with advantage.

The subject of arteritis is treated at some length, and several interesting cases are given, but the chief attention of the author has been obviously directed to that of aneurism, and its several varieties. On referring to the treatment of aneurism by pressure, which has of late excited so much attention, we find the merits of the Dublin Surgeons, in the revival and again bringing into notice of this mode of treatment, acknowledged. The author expresses the opinion, "that this method of treating aneurisms of the femoral and brachial arteries will, after a few years, be universally adopted," and that "a surgeon will not consider himself justified in using the knife, until pressure has had a fair trial." Mr. Crisp had before expressed his belief, when writing on this subject in 1844, that pressure might be more frequently adopted. At that time he was acquainted with only six recent successful cases. The general table before referred to, comprises twenty-one cases, and others he says "have been treated successfully by Messrs. Todd, Molloy, Duggan, Cusac, [Cusack, we presume, the President of the Royal College of Surgeons of Ireland,] Crampton, Harrison, Datnell, Armstrong, and O'Ferrall. Considering the vast importance of the inquiry, and the opposition still offered to this mode of treating aneurism, by Professor Syme, of Edinburgh, and some other distinguished surgeons, the cases here alluded to, ought to have found a place in the general table, or what would have been better, all the recently-recorded instances, successful or otherwise, in which compression had been had recourse to for the cure of aneurism, might have been given in a separate table, which would not have been surpassed in interest by any other in the work. It may be observed here, that the author is not disposed to place much reliance on the operation of galvano-puncture, lately recommended by M. Petrequin, of Lyons, which indeed, is little more than incidentally

mentioned, and dismissed in a single brief paragraph of some ten or a dozen lines.

As a subject of some interest and occasional embarrassment to the practitioner, and at the same time, often the source of much alarm and anxiety to the patient, we were desirous of ascertaining whether the remarkable pulsation in the epigastrium, formerly so generally looked upon as depending on aneurism, had received any additional illustration in the work before us. The attention of the profession in this country was first called to the nature of this pulsation by Dr. Baillie, ("Transactions of the College of Physicians," vol. IV.,) and since that time its non-connection as a symptom with aneurism has been very generally admitted. There is, however, some reason to believe, that a too ready reception of the views of Dr. Baillie has, in some instances, led to an undue disregard of the symptom, which we may observe whenever present should receive the closest investigation on the part of the practitioner, however desirous he may be of giving his patient the benefit of the more cheering views of its import which are unquestionably to be entertained in many of the cases which present themselves.

Mr. Crisp classes the cases in which this pulsation is observed under three categories:—1. "Those depending upon constitutional causes, such as chlorosis, hysteria, anæmia, from loss of blood, &c.; in short, any state of system inducing an impoverished condition of the circulating fluid, or derangement of the nervous functions." 2. Mechanical obstruction, as from tumours of various kinds pressing upon the aorta,—"enlarged pancreas or spleen, scirrhous stomach, diseased mesenteric glands, and collections of air and scybalous matters in the bowels." 3. Sympathetic affection of the aorta with other diseased states, considered by the author as the most frequent form under which the symptom appears.

In reference to this last section we find the following observations:—"Although," says the author, "I am disposed to agree with these authorities, (Dr. Baillie, Dr. Fausset, and Dr. Stokes,) that stomach or intestinal affection is generally the exciting cause of this malady, I believe that it can only take place when the parietes of the vessel are in a weakened condition: this probably depending upon structural defect, or the derangement of nervous influence. It is difficult to imagine that local pulsation can arise from nervous excitability alone, or that the upper part of the aorta can be morbidly excited without the lower portion being in a similar state; if, however, the coats of the artery, from want of innervation or structural peculiarity, lose their tone, and possess greater tenuity and extensibility in certain parts, the phenomenon is more readily explained. If functional disorder, or structural lesion of the stomach alone, would produce inordinate pulsation in a *healthy* artery, these cases, instead of being rare, would be of daily occurrence."

Mr. Crisp gives the appearances observed after death in some instances in which this abdominal pulsation had been noticed, but they throw little light on the pathology of the affection. In one only of them are the coats of the aorta described as being "rather thinner than natural," and the expression, it must be admitted, is, to say the least, a very indefinite one.

Observations on Aneurism, and its Treatment by Compression. By O'Bryan Bellingham, M.D., Edin., Fellow of and Professor in the School of the Royal College of Surgeons, in Ireland, &c., and one of the Surgeons to St. Vincent's Hospital. London. 1847. pp. 181.

We notice this little work here, for the purpose of recommending it as giving a compendium of the history of the treatment of aneurism by compression. It moreover contains a summary of the cases of aneurism in which galvano-puncture has hitherto been performed, together with a brief exposition of the mode in which it acts, in effecting the cure of aneurism. On each of these subjects, and especially on the former, it will be found to afford interesting and useful information; and to the operative surgeon cannot but prove of much assistance in directing his attention to the sources where more ample details of the cases referred to may be obtained.

Proceedings of Societies.

NEWTON BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ANNUAL MEETING.

(*Continued from page* 471.)

GALVANISM IN UTERINE HÆMORRHAGE.

Dr. Radford reported the following instance of successful application of galvanism to the uterus in a case of accidental hæmorrhage, which shews that the stimulation of the uterus may be efficiently produced *mediately* through the abdominal parietes:—

On October 13th, 1846, I was requested to visit Mary Daniel, who was said to be much reduced by continued flooding. The following are my notes of the case at the time:—She is thirty years of age, tall and thin, and of a leuco-phlegmatic constitution. She has a bad cough, and expectorates a quantity of muco-purulent matter. She is now in labour of her fourth child. Her first labour was quick, and the child a girl;—in her second, she was still more speedily delivered of a boy;—the third was also a boy, after a lingering labour. All these three labours were attended with excessive *post-partum* flooding, in which extreme syncope occurred, and were followed with great weakness, from which she was a long time before she recovered. Her present labour (the fourth,) began at eleven o'clock p.m., October 12th, and regular pains continued at short intervals until half-past five the

next morning. When Mrs. Mather, the midwife, visited her, the os-uteri was nearly fully dilated, the membranes had spontaneously ruptured, and a small quantity of liquor amnii was discharged. There was a continued dribbling discharge of blood, which was accompanied at times with gushes. The pains now altogether ceased, and did not return for two or three hours, and then so slightly as to be scarcely felt by the patient.

I arrived with the galvanic apparatus at the patient's house at twelve o'clock at noon, and was kindly accompanied by Mr. Runcorn, the resident medical officer of the Lying-in Hospital. She was very much exhausted, her countenance ghastly pale; her lips and tongue were also very pale; the pulse was very frequent, and so feeble as sometimes not to be felt. The os uteri was nearly fully dilated, and included a portion of the head which had passed through it; there was a dribbling pale sanguineous discharge; there had been no pain of consequence for a considerable time as above reported. I now applied my hand on the abdomen over the uterus, and was immediately struck with the excessive thinness of the abdominal and uterine parietes. The rotundity of the breech, and the sharp and projecting parts of the child's limbs, were easily felt, and one part could be as readily traced to another, as if only covered with two thin folds of cotton cloth. In fact, I could easily grasp a limb. I now mentioned to Mr. Runcorn, that I considered it a very good case for the application of galvanism; and I also mentioned our plan to the patient, who at first felt a little objection, but was readily persuaded to its use. The power used, at first, was slight, but gradually increased until the lever was placed at the highest point. The two hand conductors were only used, and applied externally on opposite points on the abdomen, varying from time to time their relative positions, thereby carrying the galvanic fluid through the longitudinal, transversal, and oblique diameters of the uterus. The beneficial influence of the remedy was soon apparent, and the extreme atonic state of the uterus was now gradually exchanged; its parietes became firmer, and the edges of the organ, which before were so soft as to appear to float amongst the abdominal viscera, from not being traceable, now became defined. This favourable organic condition proceeded; and the induced pains, at first grinding and slight, became powerfully expulsatory; and the child (a girl,) was born alive at half-past one o'clock, about an hour after we began our operations. As soon as the uterine energy was fully roused, the child was rapidly and forcibly expelled. The hand was applied over the uterus, which was found firmly contracted. The discharge of blood ceased as soon as the uterus began to contract. The placenta was expelled in about five minutes; the uterus had further firmly contracted; there was not the least hæmorrhage, and the constitutional condition of the patient was much improved, and indeed much better than could reasonably have been expected.

October 14th. No flooding; slept well; passed urine; tongue moist; pulse 90; cough very troublesome; bowels not moved; belly free from tenderness; uterus felt to be firmly contracted; she had very slight after pain, at which she expressed herself surprised, having so severely suffered after each of her former labours; there was milk in the breasts. Ordered child to be applied; an enema to be administered. To take Opii, gr. ss.; Extr. Hyoscyami, gr. iij., three times a day. Linctus Papav. for cough.

15th. Slept well; tongue clean; pulse 84; bowels once moved; passed water; slight lochial discharge; plenty of milk; belly free from pain. Continue the medicine.

From the above date she continued to gain strength, and her cough to improve, and when last seen was quite well.

Remarks.—There is no apparent cause for the hæmorrhage; it may, however, have been produced by the violent cough acting mechanically upon a portion of the uterine parietes, thereby inducing local spasm, which very frequently tends partially to separate the placenta from its attachment. Rupture of the membranes in case of accidental hæmorrhage, in general effectively arrests the discharge; but in this case, as in many others which have fallen under my observation, it failed to bring about complete uterine contraction. What plan can we depend upon under such circumstances?—Artificial delivery?—Secale cornutum?—Galvanism?

The first or artificial delivery is liable to serious objections in the great majority of cases; and therefore we ought only to have recourse to it when some extraordinary circumstance exists to demand this procedure.

The second means which may be employed is the Secale cornutum. This drug is liable to great deterioration; its operation is not always certain; its failure depending sometimes, perhaps, on its inert qualities, but frequently on a constitutional idiosyncracy which resists its powers. There are organic states which forbid its use;—when the os uteri is undilated or undilatable, the child being still alive, it ought not to be adminstered. If in such a case it induces powerful tonic contraction of the uterus, it destroys the child; we cannot control or confine its action, and therefore it is totally unsuitable to cases in which we only want a limited effect. Again, if exhaustion is an element in the case, it is wholly inapplicable, as we ought not to adopt any means which tend farther to depress the vital powers.

The powerful and sanatory influence of galvanism was most decidedly obtained in the preceding case and the great advantage of this agent is, that its effects may be carried to any degree, from first only exciting the uterus so to contract that its diameters are lessened and that its tissue comes to be applied to the body of the child. These however may be at pleasure increased, so as to accomplish the expulsion of the child and placenta. The gradual changes produced upon the uterine tissue were admirably seen in the foregoing case; and also its great power, developed by its continued application, to arrest the discharge, expel the child and the placenta, and leave the organ safe from

the occurrence of *post-partum* flooding. It is well here to call to mind, that this woman had in all former labours, serious *post-partum* floodings, and violent after-pains. In the present case, she was saved the danger of the one, and the suffering of the other.

On enquiry by Mr. Ellis Jones, whether the ergot might not have proved equally efficacious, in case it had been had recourse to, Dr. Radford expressed his own conviction that the galvanic stimulus was preferable, on the grounds of the greater certainty, capability of modification, topical exhibition, &c.,—and he laid great stress upon the power of producing contraction of a tonic or interrupted form, as affording the nearest approach to nature.

FEVER.

Mr. John Burrows inquired if any members of the Branch Association had tried Mr. J. H. Stallard's hydropathic mode of treating typhus fever, as furnished in the "British and Foreign Medical Review," January, 1847. No one stating that he had adopted the practice, Mr. Burrows related the results of his experience with regard to it, and the mode of its application. He premised by cleansing the primæ viæ. If the skin remained hot and dry, the mental faculties dull and cloudy, the limbs painful and weary, he ordered his patients to be stripped and enveloped in a sheet wrung out of cold water, and closely wrapped in two thick blankets, like a mummy or package, and covered with the ordinary bed-clothes. This application was continued for thirty or forty minutes, according to the effect produced. During the interval warm diluents were freely administered, and when a copious perspiration was induced, the wrappings were removed, and the patient was covered with a blanket and the usual bed-coverings. When the patient exhibited all the symptoms of "famine-fever"—viz., a cold skin, feeble sinking pulse, and an indifference to surrounding friends, he modified the treatment, wrung the sheet out of very hot water, and covered the patient just the same as when the cold sheet was applied, gave hot wine-negus, with the solution of the acetate of ammonia, and endeavoured to direct the circulation powerfully to the skin. Sudoresis being produced, the patient was covered as in a state of high excitement, but with this difference—a hot brick was covered with wet cloth, and wrapped in flannel, and then applied to the feet, which acted upon the skin like a vapour bath. By this process the morbid heat was reduced, the excretory functions of the skin restored, and the blood depurated from those effete matters which the suppressed excretions of the skin had retained. The patients invariably expressed themselves as being very much relieved by the treatment. On the return of the febrile symptoms, the process was repeated, once each day for three or four days. The result was, that some continued to convalesce from that period, others had symptoms of well-marked crisis on the eleventh or fourteenth day of the disease, which was likely to have run on to the twenty-first day, as far as could be calculated upon according to the ordinary ground of prognosis. Mr. Burrows felt fully convinced, that when the above treatment has been employed in the early part of the first period of the disease, or that styled the period of insidious invasion, marked by depression of spirit, aversion to ordinary pursuits, languor, weariness, and a slight sensation of coldness of the skin, arising from exposure to the "febrile virus," that the wet sheet, with purgative and diaphoretic medicines, has prevented the further development of febrile action, and removed the first impression made by the infectious miasm upon the nervous system.

Mr. Burrows also related a fact that had obtruded itself upon his notice,—that though the "famine-fever," which was so blighting and prostrating to the vital powers, in the case of its first communication, from a person in pauper life to a shopkeeper, or to a person in respectable circumstances, yet it was very much modified in its depressing influence upon the nervous system, and through it to all the vital organs, when transmitted to a second member of the same family. It was very much modified in all its accompanying symptoms, the petechiæ remained a shorter time upon the skin, the depressed powers of life sooner rallied, re-action was established, nature seemed to struggle powerfully with her foe, and finally overcame. In all the cases of second transmission in those families that could command a frequent change of bed and body linen, a large supply of chloride of lime, and free ventilation, the patients recovered. Whereas, in many cases of "famine-fever," when communicated even to those in confortable circumstances, great collapse ensued about the second or third day, manifested by a cold, shrivelled skin, cleaving to the muscles, tremor of the arms, a pallid contracted countenance, sometimes a little flushed, a dull, cloudy, sunken eye, and difficult deglutition; in fine, every symptom indicative of the blighting and prostrating influence of the malady, under which nature appeared to succumb to her foe, without making a single struggle to withstand him, or raising a hand to ward off the blow.

Dr. Duncan, the Officer of Health to the Corporation of Liverpool, favoured the meeting, at the solicitation of the Chairman, with the subjoined facts relative to the present state of the so-called "Irish" fever in the district of Liverpool.

The number of cases under treatment at the present time would amount to between 7000 and 8000 in the town. (Dr. Duncan was only stating round numbers from memory, not having any notes with him to refer to.) The *deaths* amounted to about 200 per week, whereas in ordinary times the mortality from fever was rated at about ten per week. There were, in several *fever-hospitals, sheds, and lazarettos*, altogether about 1600 cases. In *private practice* there were calculated to exist from 1000 to 2000 cases. The greater number of *pauper* cases were treated at their own *homes*, if cellars and human pig-styes could be dignified with such a term as "home;" and there were about twenty-five medical men engaged in rendering them whatever services could be available in their horribly over-crowded and filthy dens. Numerous cases must daily be lost for want of that accommodation which the Parochial Board had found itself unable to supply, or at least thought itself so, equal to the emergency. The sum total of fever cases in the town, including

public and private practice, was estimated only approximately by means of comparing the ratios of mortality per centage, which would give somewhere near the total estimate of from 7000 to 8000. Dr. Duncan stated, that the district registration yielded thirty or forty deaths a week for private practice. The fever had assumed latterly a much severer form than at its first eruption, the mortality having increased from about one in thirty to about one in ten. Many instances now presented themselves in which the subjects of its attack were "smitten down at once," and not unfrequently exhibited a collapse so fearful as to preclude the occurrence of re-action. Dr. Duncan considered that the evidences of its contagious characters were so strong as to remove all ordinary doubts upon that head. "Eight catholic priests and four parish surgeons had fallen victims to the epidemic."

Dr. Swift remarked "that in three weeks, 8197 cases of fever were attended, and the number of deaths during the same period was 416.

OBSTRUCTED VAGINA.

A case of obstructed vagina, from a duplicate investing mucous membrane, complicating parturition, was read by Mr. John Burrows, of Liverpool:—

Mrs. Bright began to have labour pains at 9 p.m., December 25th, 1846. "I saw her," reports my assistant, Mr. Dale, "at 5 a.m. December, 26th. The pains were slight as to power, but hard to bear. When I introduced my finger into the vagina, to ascertain the state of the os uteri, I found interposed a membrane, which seemed to divide the vagina into two compartments. I then carefully passed my finger all round the vagina, to see if I could find an opening to the uterus, but did not succeed. The membrane was very thin and flaccid, so that I thought I could distinguish the os uteri through it, dilated to the size of a shilling. I hoped the membrane would offer little resistance to the pressure of the child, and finally give way when the pains became stronger."

I saw her myself about nine the same morning. On making an examination per vaginam, I was considerably puzzled: she had regular bearing pains, but I could not detect any os uteri. As the finger explored the vagina, it seemed to traverse a smooth surface, without any aperture or projection. Pausing and reflecting on the case, I examined again, but without obtaining any information, as to the real anatomical formation of the parts, except that the vagina had no appreciable communication with the uterus. I thought that it was a case that would require some surgical operation. As the pains increased in power, I felt a substance pressing against the superior parietes of the pelvis. At length, from the violence of the pains, tension, and consequent thinning of the vaginal membrane, I felt through it a substance with an aperture resembling the os tincæ. I began to consider as to what means I should adopt, in order to open a communication between what I supposed to be the cervix uteri and vagina, and made another very minute examination, with the view of detecting, if possible, any slight aperture which might communicate with the uterus, but in vain. I waited till she had more pains, and as they began to increase in violence, I feared some injury might be done to the uterus or vagina if something were not done to enable the uterus to expel its contents. I explored once more the vagina to determine what line of practice to adopt, when I was agreeably surprised at finding an aperture in the vaginal membrane, in the angle formed by the junction of the body of the *os pubis* with the right *ischium*, through which I could pass my finger and detect the presenting part, which I found to be the breech. The os tincæ being fully dilated, and having receded from the presenting part, I determined to make an incision through the obstructing membrane towards the mesial line, and downwards in the direction of the sacrum. But Nature, almost always adapting her operations to the peculiar exigencies of the case, interposed, and accomplished the solution of the continuity, much better and much more agreeably to the patient than art could possibly have done. The interposing membrane gave way to the pressure of the presenting part precisely in the direction I had intended to open it; and it appeared to fall down upon the sacrum. I then expected to find the *psoæ* and *iliacus* muscles without their normal vaginal mucous membrane; but, to my great surprise, they presented their usual pelvic surface, being covered with the membrane, (by which the pelvis is formed into a distinct compartment or cavity of the body,) so that the pelvis was divided into an anterior and posterior cavity, having no communication with each other, except by some small aperture which was not appreciable to the sense of touch. The subsequent stages of the labour were as regular as they generally are in breech cases, and the child was born alive. The mother had no very untoward symptom afterwards, except a purulent discharge, which came on in three or four days after delivery, and which was cured by an astringent injection of the diacetate of lead. There was some tenderness in both inguinal regions, with slight febrile disturbance and colic pains, which were soon relieved by the application of six leeches, cataplasms, and the use of diaphoretic and sedative medicines.

This case is somewhat important in a physiological point of view, especially as regards that marvellous and hitherto unexplored act of Providence, *conception*. The sole mode of impregnation, was either by imbibition of the seminal fluid, or its transmission through a small but undiscovered foramen.

EPIDEMIC FEVERS OF LIVERPOOL.

At the conclusion of the other communications, Dr. Watson, one of the Branch Secretaries, begged leave to call attention to a few particulars connected with the later epidemics of Liverpool, from that of the fever epidemic of 1844, up to the existing sporadic or zymotic fever. First, the dysentery of last autumn had presented in Liverpool unusually intractable and formidable complications; hæmorrhage was very frequent and alarming. Dr. Watson read some outlines of cases, and exhibited some drawings by a professed artist, of the *post-mortem* appearances, which were faithful transcripts of the diseased appearances, ulceration, false membranous deposit, engorgement, &c., &c. One remarkable

case was furnished to him by Dr. Turnbull, Physician to the Liverpool Northern Hospital. The notes of the case were read. The complication of other concurrent diseases under the epidemic constitution was also alluded to.

Dr. Watson mentioned that he had some statistical tables of the age, sex, and sanitary or non-sanitary localities, &c., of some hundreds of cases of the epidemics, stretching from 1844 to 1846, prevalent in the Liverpool district; viz., fever, cholera, diarrhœa, and dysentery, which he had obtained from three or four district registrars, and which he had been politely granted permission to make use of for professional purposes, by the Registrar General. These data he regretted that he had not been able to reduce for presentation to the meeting, but at some early period he hoped to submit them in some shape to the profession at large, to be estimated at their mere simple value as a group of facts, perhaps capable of subserving some useful purpose in the future, for points of comparison, or as confirmatory at least, of certain propositions enunciated already, or tenable in reference to these diseases.

Dr. Watson wished to invite the attention of practitioners to the utility of investigating the reactions of the urine in fever at all times, but especially in the typhoid forms. Some observations of M. Schönlein were quoted, which went far to establish the certainty of certain elementary changes in the constituents of the urinal secretion, and which, in their indications as re-actions, presented themselves rather concurrently than sequently, upon other structural or functional changes; and upon the verification of such pathological facts, further evidence will be afforded the practitioner of medicine, if not for diagnostic objects, at least for those of prognosis. Dr. Watson considered that the data chemistry was daily opening out, were never developing themselves in a more useful channel, than in the bedside study of the changes in the excretions and secretions of the human body, when the various organs were assailed by diseases such as fever; and wherein, from the generality of the lesions of functions, and lastly of the organs themselves, it becomes most important to endeavour to obtain additional light upon the questions of prognosis, favourable or unfavourable.

It would be invaluable truly, if, like "coming events casting their shadows before," the re-actions of the urine could be so systematically legible, as to anticipate the pulse, tongue, skin, &c., in predicating the approaching phase of an eventually lost or restored equilibrium of the febrile balance. Dr. Watson said that his endeavours in a few cases to satisfy his mind, were contained in notes he held in his hand, but which were too imperfect to present to the meeting on this occasion, or would occupy too much time to detail. He was only an inquirer, and would not wish to speak too sanguinely, but he did think he had not been following M. Schönlein's steps in vain. He had learnt to place some reliance on these changes.

Dr. Watson alluded to some fallacies which had presented themselves to him, and yet which were not inherent in the thing, but mere accidents, that greater caution might anticipate and obviate. Further facts were reserved for another opportunity.

The members afterwards dined together under the presidency of Robert Thorpe, Esq., of Manchester, and separated with the conviction that the opportunity afforded members of the profession, from distant quarters, of meeting one another, was greatly conducive to the maintenance of that mutual respect and unanimity which ought to cement together those pursuing every liberal profession.

NOTES FROM A PRACTITIONER'S DAY BOOK.

(Continued from page 472.)

CAUSE OF BILIOUS HEADACHE.

What is the cause of bilious headache? Is it a sympathy between the brain and the liver, operating through the medium of the nervous system; or does it arise from the irritation produced in the brain by the circulation of the biliary elements which have been retained in the blood? The latter, I suspect. We have no evidence of a sympathetic pain in the brain produced by any other cause, but we have abundant evidence of pain produced by causes operating through the cerebral circulation. The alcoholic headache, which, in some people, begins very soon after drinking a few glasses of wine, undoubtedly depends upon the circulation of the alcoholic stimulus through the brain. With bilious headache we have signs of an increase in the cerebral circulation; the head feels hot and full, the veins of the face are congested, and the carotids beat with unusual force. All this is no doubt a re-action produced by the poison.

There is a disordered action of the brain, which I have occasionally experienced during a derangement of the biliary excretion, and which I have not noticed under other circumstances. In conversation I have learnt that some other people feel the same. It generally commences when I am on the point of dropping off to sleep, and am in a condition between sleeping and waking. Every object thought upon appears to increase in size. The morbid action once begun cannot easily be dispelled. I have got up and walked about the room, but all to no purpose. The mental idea of the bed-post, a wine-glass, my own great toe, as these objects were dwelt upon, would gradually enlarge, until they assumed an enormous magnitude, the vision only disappearing when lost in its own immensity. When a child, and residing in a tropical climate, I remember that the experience of this sensation always convinced me that I was on the point of what we used to call a "bowel" complaint. It is principally from my recollections of this period, that my description is taken; for although I have occasionally suffered the same at a more recent date, the attacks have been very rare, and of much shorter duration. All this, I suppose, depends upon the irritation of some particular part of my cerebrum, the organ size, according to the phrenologist, being rather fully developed.

FUNGUS HÆMATODES.

In April, 1846, I was consulted about a little boy, 13 years of age, who, in consequence of a fall, was

suffering from inflammation of the left knee-joint. The injury appears to have been of the most trifling description, and on closely questioning the parents, I found that the lad had, for some little time previous, complained of occasional slight pain, and a sensation of weakness in the part. The synovial membrane was distended with fluid, and there was some heat about the joint. Rest, the application of a few leeches, and the use of a discutient lotion, removed the general swelling, but when this had subsided, I found a slight prominence on the anterior portion of the inner condyle, from which it apparently arose. This was circumscribed, hard, and situated underneath the soft textures, which were freely moveable over it. As there was no pain, and very little tenderness, I now allowed my patient to walk about as usual; the consequence was another attack of synovitis. When this had yielded, which it soon did, to a similar treatment as before, I still noticed the same projection from the inner condyle; it had even increased in size, and was rather more painful and tender, but yet not so to any great degree. The child belonged to a family in which the general characters of a strumous diathesis were strongly marked, and of his brothers and sisters three had died of scrofulous complaints. These circumstances induced me to believe that the affection was no other than that of tubercular disease of the cancellous structure of the femur, which is so common amongst children. On this opinion I acted with regard to the treatment, in pursuit of which I received every assistance from the parents, who were extremely sensible people, and from the lad himself, who bore his subsequent sufferings with a fortitude which I have never seen equalled. Perfect rest to the limb was enjoined, and the iodide of iron, with an occasional mercurial purgative, prescribed. I allowed my patient a liberal and nutritious diet, and directed him to live as much in the open air as he could without using the limb. No improvement followed. A blister was applied over the lower part of the thigh, but the prominence continued steadily to increase in size. I began now to notice a general enlargement of the knee, the popliteal space being also somewhat fuller than natural. The joint was becoming stiff, and the lad showed a disposition to keep the limb flexed, as this was the most comfortable posture; I therefore thought it advisable to retain the limb in such a position as would be useful if anchylosis should occur. A starch bandage offered the readiest means of effecting this, and it was applied, the knee being first covered with lint spread with ceratum saponis.

At this time I was myself confined to my chamber with pleurisy, and prevented from giving regular attendance to my patient; his mother, however, occasionally called, and gave me an account of his progress. The starch bandage was ill borne, for the swelling continued to increase, and the pressure became so inconvenient, that I was obliged to direct its removal.

After the lapse of five weeks I was again able to visit my patient, and the first glance told me, what I had never before suspected, that the disease was fungus hæmatodes. The enlargement was much greater, and seemed entirely to affect the lower extremity of the femur; the circumference at the widest part, which was round the condyles, being equal to nineteen inches. From this point it sloped abruptly down to the head of the tibia; whilst in the other direction it gradually subsided towards the middle of the thigh, where it was imperceptibly lost. The whole tumour was of a moderately solid feel, some parts being softer than others, but at no point could I detect the presence of fluid. The skin was of a dark purplish colour, and through it were seen numerous distended and tortuous veins.

The question was, now, the propriety of amputation. In favour of this proceeding were the circumstances that the glands in the groin were quite sound, not even being enlarged from irritation; that there was no evidence of any internal organ, or other part being affected; and the certainty that the disease would at no distant period prove fatal after considerable suffering. Against surgical interference were the facts—first, that the operation required was a very severe one, nothing less than amputation at the hip-joint being justifiable; secondly, the strong probability of the disease reappearing in the wound; and, lastly, that with our experience of the highly contaminating nature of the disease, we could not expect a long period to elapse without some other part becoming affected. Under these circumstances it was decided at a consultation, that the state of the case should be laid before the patient and his friends, the surgeons not feeling themselves justified in pressing either alternative in the slightest degree. It was decided that the operation should not be performed.

From this period the history is that of extreme suffering, borne with quiet and even cheerful resignation. To notice that there was an occasional slight irritation of temper, would be only to confess humanity; and even these little outbreaks of pettishness were afterwards more repented of by the person who uttered them, than felt by those to whom they were addressed.

To allay the pains, which now became constant, and aggravated in paroxysms, opium was administered, and it was found necessary to give it frequently, and in gradually increasing quantities. Ten drops of laudanum was the first dose, but towards the close he took as much as two drachms every three or four hours. It, however, agreed well, never producing headache or constipation. During the progress of the disease, diarrhœa repeatedly occurred, but it was in general easily checked by the chalk mixture, aromatic confection and catechu. At this period he had an occasional fit of a very peculiar character; after a slight warning, by a sensation of giddiness, the muscles generally would become rigid, the extensors being principally affected, so that the head would be drawn back, and the hands and fingers be straightened. After a few seconds, during which he was quite conscious, though unable to speak, the contractions would relax. These fits were accompanied by violent palpitations, which continued for a few minutes; no other symptom which appeared showed that any other part was affected, and to the very last the inguinal glands retained their natural size.

The tumour continued to increase; it had attained

a circumference of thirty-two inches before the skin gave way, and extended as far as the upper third of the thigh. If the sufferings were great before, they were greater still when the integuments ulcerated; they gave way at several points at once. Through some of the openings fungous excrescences protruded; others bled every time that the dressings were changed; some rapidly spread into large and deep sloughing cavities. Matters soon became desperate. The boy would not allow the limb to be raised for the purpose of dressing the wounds underneath. The bed-clothes were saturated with discharge and fæcal matter, amongst which numerous maggots made their appearance. He did not remain long in this state. Worn out by his sufferings and the diarrhœa,—by the profuse discharges and the hæmorrhage, he was reduced to a state of extreme emaciation. At length, in the middle of October, after making some very slight exertion in arranging the bed-clothes, he lay his head down, as if exhausted, and in a few seconds died quietly, having retained his mental faculties perfect to the very last.

C. ARNECAPLE.

General Retrospect.

PRACTICAL MEDICINE.

DIAGNOSIS BETWEEN SCURVY AMD PURPURA.

In an elaborate article *(Dublin Quarterly Journal)* which the present prevalence of scurvy has given rise to, the author, Dr. Curran, makes the following distinctions between that disease and purpura:—

Scurvy.	Purpura.
Most frequent after 18 years of age.	Most frequent between 5 and 18 years of age.
Chiefly affects males.	Females.
Gums more or less sore and spongy.	Gums bleed sometimes, are rarely sore, and never spongy.
Ecchymoses more frequent than petechiæ.	Petechiæ-like spots frequent, ecchymoses rarer.
Shades of eruption most various.	At first always dark coloured.
Lower extremities almost exclusively affected.	All parts nearly equally.
Muscular indurations nearly always.	Never.
Hæmaturia scarcely ever.	Not infrequent.
Bloody stools very rare.	Frequent.
True hæmoptysis never.	Occasionally.
Neuralgic pains and pains in the spots invariable.	Never.
Effusions in joints frequent.	Never.
Contraction of flexor muscles frequent.	Never.
Lasts for months, if not interfered with.	Rarely lasts more than a few days.
Frequently fatal if not checked	Scarcely ever fatal.
Always in connection with errors in diet.	None such discoverable.
Affects large numbers of individuals at the same time.	Sporadic; epidemics extremely rare.
Speedily cured by lemon-juice and fresh vegetables.	Cured by purgation and turpentine.

ÆTHER IN MANIA.

In the licensed lunatic wards of the St. Marylebone Infirmary, Dr. Boyd has tried the inhalation of sulphuric æther in four cases, one chronic and three acute, of violent mania, amongst females, with excellent effect, and without any unfavourable results. The tranquillizing effect was produced at various intervals of from two to ten minutes; at a time, too, when the patients were unusually violent. All of them appeared to become intoxicated. Before this effect was fully produced, their anger in every instance seemed turned to joy—a soporific effect was the utmost that was produced in any case. The patient in whom it was administered for the longest time felt the prick of a lancet on the opening of a small abscess. Two of the patients slept well on that night. In the other two, the effects were only temporary; one of them became talkative and troublesome again in a few minutes, but was less violent than at first. The æther was administered by means of a hollow sponge, just large enough to cover the mouth and cartilages of the nose, the opposite end of the sponge having been previously moistened with half an ounce of æther, the same that is used in the æther apparatus previous to operations. A sponge may be a more wasteful way of useing the æther; but the difficulty of applying the instrument in cases of insanity would be often very great. Some who have opportunities may feel inclined to test the efficacy of æther in such cases as those above mentioned.—*Lancet.*

REMEDY FOR THE BITE OF A VIPER.

M. De Rosa states that he accidentally discovered the nostrum of a noted quack, which had been used in this accident with universal success. It proved to be the *Trifolium Lupinella*, which was mashed, and applied as a poultice. Several opportunities of testing its virtues soon presented themselves, and according to M. De Rosa it succeeded in every one.—*Il. Filiatre Sebezio*, Dec. 1847.

SURGERY.

NASAL CALCULUS.

Dr. Cooke, of Long Island, reports the following case of nasal calculus:—

Mrs. H., aged 25, of good constitution, had been suffering for the last eighteen months from severe headache; the pain most intense over the frontal sinuses, accompanied by an offensive discharge of a muco-purulent character from the left nostril and throat. The pain in the head had increased to such a degree, as to materially impair her memory, causing at times dimness of sight, particularly of the left eye, giddiness, with loss of appetite, and a disordered state of the digestive organs; in fact, her general health began to be seriously affected, and in this condition she applied for advice.

On examination, the nasal passage, on the left side, appeared to be completely blocked up. I was first led to suppose that the obstruction might be owing to a polypus, or other morbid growth, but on passing in a probe a hard substance was encountered, about two inches from the orifice, feeling to the touch like a portion of bone in a state of necrosis. The septum was forced over to the opposite side, causing the right nasal passage to be somewhat contracted. The left lachrymal duct was obstructed, and pressure made at the inner canthus was followed by a discharge of

purulent matter from the puncta. Stillicidium lachrymarum existed, and the conjunctiva of the eye was somewhat injected. The probe being withdrawn, a pair of polypus forceps was then introduced, and with some difficulty I succeeded in grasping and extracting a hard body through the nostrils. Considerable hæmorrhage followed, but it was soon checked by the application of cold. The foreign body was of irregular form, rough, about an inch long by half an inch in diameter, hard, brittle, and evidently of a calcareous nature.

The patient was not aware of having introduced anything into the nose, but stated that she first observed some obstruction about eighteen months since.

Inflammation of the mucous membrane of the nose and throat followed, but yielded readily to the antiphlogistic treatment.

In "Ranking's Abstract," vol. 2, p. 106, several cases of nasal calculus are recorded, but I am not aware of any that have been published in this country. *Boston Medical and Surgical Journal*, June, 1847.

ENLARGEMENT OF THE LABIAL GLANDS.

In December, 1845, a man aged 25, applied to Mr. Wilde, on account of a remarkable enlargement of the upper lip. He states that two years ago his upper lip, previously of natural proportions, began to thicken and enlarge, particularly on its inferior and inner surfaces; that since then it has gradually increased in size, but without pain. He complains of some degree of irritation and chapping from exposure of the mucous membrane. The lower lip was quite unaffected, but the upper, when the mouth was closed, formed a large projecting red mass, not unlike a pair of ripe strawberries, the division between them being formed by the natural sulcus of the lip. The surface of these projections exhibited several minute orifices, from which globules of clear fluid were seen to exude: these were the labial glands largely developed.

As the patient was very anxious to be relieved of his deformity, Mr. Wilde removed it in the following manner:—The coronary arteries being commanded by pressing the angles of the mouth, an incision was made through the mucous membrane, about three-eighths of an inch from the edge of the lip, and two inches and a half long, and another from the back, so as to include the diseased mass, which was then dissected out. There was scarcely any hæmorrhage, and the wound being brought together by the continued suture, the deformity was seen to have been completely removed. The diseased mass consisted of a congeries of globular bodies, resembling trout spawn, and nearly transparent.—*Dublin Quarterly Journal.*

HERNIA OF THE CÆCUM AND APPENDIX VERMIFORMIS.

Although not so rare as the author, M. Lansberg, seems to think, the following cases are worthy of record:—

1. A female, aged 50, was the subject of a femoral hernia, which became strangulated, and formed a tumour the size of a large apple, at a distance of half an inch from the right labium. The operation was performed, and on opening the sac it was found to contain the entire cæcum and its appendix. The strangulation was caused by numerous adhesions at the neck of the sac, which were broken down with difficulty.

2. A woman, aged 41, had some time back perceived a small tumour in the right groin, which disappeared. After some kind of exertion the swelling re-appeared, with symptoms of strangulated hernia. The surgeon fancying that he had reduced the hernia by the taxis, left her; but she soon became much worse, and when seen by M. Lansberg, was dying with the symptoms of strangulated hernia. Dissection revealed the appendix vermiformis partly altered in appearance, but no other portion of the intestine, whence it is probable that the cæcum had been returned by the taxis. This gut was gangrenous, and had ruptured and allowed of fæcal extravasation.—*Allegemeine Medicinische Cent. Zeitung.*

TREATMENT OF SYPHILITIC BUBO.

Mr. Hamilton says,—"In the treatment of syphilitic bubo, I fully agree with those surgeons who recommend a bubo, even when suppuration has taken place, to be discussed, if possible, without opening it. This can be accomplished, and should be tried, even where the integuments are thinned, and fluctuation is distinct. It can best be affected by the administration of mercury, with the application of a few leeches, and compression, gentle at first, and gradually increased by means of a compress of lint, wet with the Lotio Plumbi, and a spica bandage. As the bubo gets pale, and the inflammatory action is on the decline, the strong tincture of iodine painted over the surface tends very much to hasten the absorption. In this way I have put back many buboes, in which suppuration was fully formed."—*Dublin Quarterly Journal*, May, 1847.

NEW MODE OF CURING ECTROPION.

Dr. Blanbery regards this affection as mainly induced by a peculiar state of the orbicularis muscle, consisting in a preponderance of contractility in the fibres which surround those which form the ciliary portion of the muscle. In a man, aged 50, with ectropion, Dr. Blanbery found a furrow below the ciliary margin of the lower lid, which became deeper every time the patient closed his eyes forcibly. He made a vertical incision in the lid, and divided some contracted fibres of the muscle, and thus removed the deformity.—*Gazetta di Milano*, Feb. 27, 1847.

FOREIGN BODIES INTRODUCED INTO THE EYE.

M. Petrequin, of Lyons, divides these bodies into three categories,—those which are arrested on the surface of the eye,—those which become imbedded in the cornea,—and those which, perforating the cornea, penetrate more or less deeply into the chambers of the eye. In a manufacturing town like Lyons, these accidents are very common:—

1. Foreign bodies arrested upon the surface of the eye often become hidden under the upper eyelid, and are of difficult removal by the usual plan of raising the lid upon a probe. M. Petrequin employs a camel's-hair pencil, and introducing it beneath the eye-lid, he passes it from one commissure

to the other, so as to sweep any foreign body into the nearest angle of the eye. If he has not a pencil at hand, he employs the feather of a pen. It acts best when dry, the tears sufficing to moisten it. Extraction in children is difficult in consequence of the convulsive contraction of the eye-lid, which often occurs, so that even opening these at all may be impossible. M. Petrequin throws in an injection of rose-water to dislodge the body from the corner of the eye where he supposes it is placed, and brings it thus easily to the free edge of the eye-lid. Practitioners should always recollect that the sensations induced by a foreign body may continue after it has been removed, so that they may not needlessly make painful researches.

2. Workers in iron or stone may have particles fix themselves to a greater or less depth in the substance of the cornea, and these are sometimes so small as to require a lens to see them in the little depressions in which they are seated. If the particle is metallic, we should try the effect of a magnet for its removal. M. Petrequin considers a forceps a bad instrument, for, however delicate it may be, we may try twenty or thirty times without being able to seize the body with it, irritating the eye more and more, and increasing the difficulty of the extraction. The case is rare for the body to be large enough to have a free position sufficient for seizure. The bistoury is preferable, but it should be a rounded one, for with a sharp-pointed one we might risk piercing the eye during one of its spasmodic movements. M. Petrequin prefers a large lancet, the point and edge not being too sharp, and its form resembling that of an abscess lancet. The patient should be seated in a chair, the arms of which he grasps. The light coming from above, he is directed to throw back his head until its long diameter becomes very oblique from above downwards, and from behind forwards. The surgeon placed behind supports it against his chest, and directs the patient to look upwards. After having raised the upper eye-lid, he directs the cutting edge of the lancet very gently and carefully upon the foreign body, and slightly scrapes the cornea. The eye immediately becomes convulsed, and is retracted beneath the lid. It is brought down again by looking at a fixed point, and the scraping again commenced. In this way the eye becomes accustomed to the contact of the instrument, and the foreign body is easily removed. It must always be shown to the patient, since on account of the continuance of pain for some hours after, he may doubt the fact of its extraction. After the operation, a plastic effusion takes place into the little cavity which becomes filled up by its organization, no trace of cicatrix remaining if the operation has been adroitly performed.

3. Cases of the third class are always grave, as the contusion produced may give rise to traumatic amaurosis, and at all events to inflammation. Two or three cases are related, one of which we abridge:—A countryman, aged 50, was admitted into the Hotel Dieu on account of a foreign body entering his eye, while cutting a stone. This occurred some time before his admission, although how long is not stated, and the patient had been submitted to means for the relief of the attendant inflammation with little success. The cornea was entirely healed, and offered no trace of cicatrix, and through it the bit of stone, not larger than a millet seed, was observed to be lodged in the anterior chamber between the cornea and the iris, at its superior external part. The conjunctiva was much injected, and the iris inflamed; the iris acted imperfectly, and some adhesions to the lens had occurred; vision was defective, and attended with great pain in daylight. M. Petrequin made an incision four lines in length, into the upper and external fourth of the cornea; the aqueous humour flowed out, and the iris presented itself. He passed in a pair of Sichel's cataract-forceps closed, and opening one blade above, and the other below, the body, he seized it with some difficulty, on account of the little support the iris furnished it, this receding from the instrument. A small portion of the iris which was prolapsed, was removed by the scissors. The patient was bled after the extraction, and he went on quite well, perfect vision having been recovered. A small hernia of the iris was removed by cauterization with the nitrate of silver.—*Annales d'Oculistique*, Vol. 17, pp. 14—20, and *Medico-Chirurgical Review*, July, 1847.

DISEASE OF THE CERVIX UTERI, A CAUSE OF ABORTION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The *Lancet* for the 24th of July last, contains an article by Dr. J. H. Bennet, on "Inflammation and Ulceration of the Cervix Uteri, during Pregnancy, &c.," in the course of which the author comments upon a passage in my book on "Abortion and Sterility," recently published, in such a manner as to make it appear that I have been guilty of some unfairness towards him. From the aversion I entertain against obtruding myself upon public attention, when the occasion has reference merely to subjects of a personal nature, I did not think any reply necessary at the time; and I should not now have solicited your indulgence on so trifling a matter, had it not been that a quotation from the article in question, tending in some measure to my disrepute, appeared in your Journal of Wednesday last, in consequence of which I am induced to crave the privilege of saying a few words by way of explanation.

From the tenor of one or two remarks that occur in the article alluded to, it appears I have occasioned its author, although quite unintentionally, some uneasiness, from (as he supposes,) my presuming to claim credit for certain opinions, which he states had been previously promulgated by him. I would not wilfully do injustice to any man, and more especially to one who is so ardently engaged in the same field of labour with myself, and for whose contributions great merit is justly due. I have not the pleasure of knowing Dr. Bennet, except through his writings; and from these I am led to esteem him as a highly talented and careful observer.

But, in reference to the point at issue. Dr. Bennet complains that I have not mentioned his name, except

in one paragraph of my introduction. The fact is, at the time when my work was completed, except the introduction, I had not perused any of his productions. The work as it now stands—the materials for which I had been several years engaged in collecting—was finished and ready for the press at the beginning of the summer of 1846. At this time the manuscript was placed, for the purpose of perusal, in the hands of Mr. D. Noble, (author of "The Brain, its Physiology, &c.," and other works,) and arrangements were completed with Mr. Churchill for its publication on the 26th of June of the same year. During the following few months I was busily engaged in the prosecution of inquiries connected with other branches of the same subject; in re-arranging, during my leisure hours, some of the materials of my manuscript, and in striking out portions which Mr. Noble thought unnecessary, but not in making additions, with the exception of the substitution of here and there a case for others less entire in their history. I had not at this period seen Dr. Bennet's book at all, having for a length of time previously purposely abstained from the perusal of any publication relating to the subject upon which I was engaged, lest I should be thereby influenced in the arrangement, after my own fashion, of the materials collected; or in deriving, unbiassed by preconceived notions or prejudice, such deductions as they might be found capable of affording. My views, however, were already well known to several professional men in Manchester, as well as to others residing elsewhere. It may be fair to state, that my manuscript was nearly six months in the printer's hands before the printing was completed; this delay may be accounted for from the few facilities possessed by printers in the country, in comparison of those available in London, as well as from the circumstance also that the printer was at the time engaged with three other publications, all in the same type.

Dr. Bennet refers to a passage in my introductory address, in which it is stated that he (Dr. B.) has only "incidentally alluded" to disease of the cervix uteri as a cause of abortion; in refutation of which he directs attention to his work, pages 47-49, where it is recorded "that ulceration of the cervix is common with pregnant women, and unless treated and cured, it generally occasions abortion," This very general statement is given on the authority of MM. Boys de Loury, and Costilhes; but no facts are adduced illustrative of the point. At pages 89 and 90, two cases are quoted from the last-named author, of disease of the uterus during pregnancy: these were treated and cured, and the pregnancies terminated favourably. But in no part of Dr. Bennet's book is a single instance given of disease of the cervix uteri having caused abortion. Indeed, the very converse of this appears to be his predominant opinion, namely, that uterine disease is the *consequence* of abortion, and difficult labour. See his cases 6, 7, 8, 9, and 10.

The author then alludes to his papers published in the *Lancet* of September 11th, and subsequently; and says that "they will be found on perusal, to contain, not only most of the facts which are narrated in Mr. Whitehead's work, but others of considerable importance, which he has not noticed." It would be an insult to the meanest understanding to attempt a refutation of this unjust and sweeping assertion. Besides, these cases, whatever they may contain, were published after the completion of mine, and I can truthfully assert, that I have borrowed nothing from them, as I did not peruse them until after my book was in print. If I had seen them in sufficient time, I should gladly have availed myself of their contents. I disown all intention of claiming precedence relative to points upon which our opinions coincide; and shall make no attempt to transfer to myself the merit of having given to the reader his first impressions upon any subject, if not voluntarily accorded, no matter how or where he first received them.

In appearing before the public in the capacity of author, my prime object was simply to lay before the profession the results of my clinical experience, with a view that these might, if possible, be rendered available in practice by others. Whether the statements I have made be original, or only corroborative of what was previously known, it is the same thing to me; under either circumstance it will afford me equal pleasure, if my contributions shall be found serviceable in the elucidation of a class of diseases which, doubtless, until recently, were very imperfectly understood, and in the calamitous consequences of which I myself have been in no trifling degree interested. I could have published similar facts long ago. The reason why I did not do so was, because the revelations which specular investigation afforded, appeared to me, at the commencement, so new and startling, that I became anxious to have the views necessarily thence arising, supported by statistical data, which I began to collect only after I had been long familar with the subject. Indeed, it cannot but be manifest, that my acquaintance with this branch of pathology must be considerably older than any of Dr. Bennet's publications, since the accumulation of the mass of facts which I have recorded, (to say nothing of others of a date anterior to those given,) is not to be accomplished in the space of a few months, nor even in less than a few years.

I have no passion to be thought an originator. I wait for no applause, but shall be content to receive that meed of praise or of censure that the public may think proper to adjudge. Yet, while I most willingly accord to others whatever is due to them, so far as I am concerned, I shall also, when called upon, not hesitate to defend my own rights and integrity, as part of my professional existence. I will repeat here what was already expressed elsewhere, that, to my knowledge, I have not borrowed from any author without acknowledging the obligation. I owe not so much as a thought, an idea, or an expression, to Dr. Bennet's publication. This is said in no acrimony of feeling, but purely in vindication of my character against the charge of injustice or want of courtesy, which I judge to be implied in the passage last quoted.

It is with considerable reluctance that I venture to obtrude myself at this length upon your time and patience. I have the greatest possible objection to

querulous disputes of any sort; and nothing but absolute necessity shall hereafter induce me to engage in so profitless and puerile a controversy as that which has reference merely to personal popularity.

I remain, Sir,
Your obedient servant,
J. WHITEHEAD.

7, Oxford Street, Manchester,
September 14, 1847.

NITRATE OF SILVER IN ERYSIPELAS.

In adopting Mr. Higginbottom's plan of treating erysipelas by the use of nitrate of silver externally, (see *Provincial Journal*, p. 458,) it is of the first importance that the solution employed should be of the strength recommended; and as the prescription, as before published in this Journal, has not been correctly given, we subjoin the proper formula:—

R. Argenti Nitratis, scr. iv. (not scr. ij.)
Acidi Nitrici, m. vj.
Aquæ destillatæ, dr. iv. (not oz. iv.)

Medical Intelligence.

SALARIES OF MEDICAL OFFICERS.

The Guardians of the Gainsborough Union, at a late special meeting, at which Mr. Weale, the assistant-commissioner, was present, resolved, that in future a salary of £35 per annum should be paid to the medical officer of the workhouse, and that the sum of £315 per annum should be the total amount of the salaries of the district medical officers of the union, in proportion to the size of their district. This is an increase of £170 upon the sum hitherto paid, or nearly double the amount of the old salaries. It is stated that the commissioners are revising all the union officers' salaries throughout England.—*Lancet.*

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, Sept. 2, 1847:—William Charles Homfray, Monmouth; John Lucas Worship, Long Melford, Suffolk.

Gentlemen admitted Licentiates, Thursday, Sept. 9, 1847:— Henry Davis Benwell; Robert Blackie, Oswestry; William Pritchard, Abergavenny; Henry Davis, Birmingham; James Payton Badley, Dudley; Joseph Thomas Clover, Aylsham; William Leyson Thomas, Neath; Folliott James Sandford, Newport, Salop; Thomas Horn, Birkenhead.

OBITUARY.

Died, Aug. 21st, at Ormskirk, aged 66, Edward Houghton, Esq., Senior Surgeon to the Dispensary, Ormskirk.

Aug. 29th, at Spa, aged 61, Thomas Beard, Esq., M.D., formerly of the Royal Artillery.

Aug. 30th, at Westport, aged 29, of fever, Peter Lavell, Esq., M.R.C.S. of Engl., Surgeon to the Shruel Dispensary.

Sept. 1st, aged 32, of fever, George Vickers Dunne, Esq., M.D., Physician to the Dispensary and Fever Hospital, at Clondonagh, Queen's County.

Sept. 4th, of fever, Dr. Lauder, one of the District Medical Officers in the city af Glasgow.

Sept. 12th, in Bedford Square, aged 45, George Darby Dermott, Esq., Surgeon, Lecturer on Anatomy and Surgery.

Lately, at Skibbereen, of fever, Thomas Goodison, Esq., M.D., of Dublin.

At Bolton, aged 28, of fever, Henry Hatton, Esq., Medical Officer of the Western District of Great Bolton.

BOOKS RECEIVED.

A Letter to Benjamin Rotch, Esq., Chairman of the Committee of Visitors, on the Plan and Government of the Additional Lunatic Asylum for the County of Middlesex, about to be erected at Colney Hatch. By John Conolly, M.D., Fellow of the Royal College of Physicians of London, and Physician to the Middlesex Lunatic Asylum at Hanwell. London: Churchill. 1847. 8vo. pp. 27.

A Copy of Reports on Sir William Burnett's Disinfecting Fluid. Printed by Order of the House of Commons.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

Mr. Crompton, of Manchester, being appointed by the Provincial Medical and Surgical Association to draw up a report on burns and scalds, embodying, as far as possible, the experience and opinions of the profession, we, the undersigned, earnestly request that the members of the Association will afford Mr. Crompton such information on the subject as they may be possessed of, and that they will further his inquiries by every means in their power.

(Signed)
JAMES HEYGATE, M.D.,
President of the Association.
CHARLES HASTINGS, M.D.,
President of the Council.

Dated September 4, 1847.

TO CORRESPONDENTS.

Communications have been received from C. A.; the Birmingham Pathological Society; Dr. Kingdon; Mr. W. C. Worthington; Dr. Ogier Ward; Dr. Kennion.

Meteorological Journals.—We shall feel obliged if the gentlemen to whom we are indebted for these reports will forward them as soon as possible after the end of each month. One of the reports for the month of June has not yet been received.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

NOTES ON THE EPIDEMIC FEVER OF RUGBY AND ITS NEIGHBOURHOOD, DURING THE AUTUMN OF 1846.

By James Paxton, M.D.

As cases of fever are still occurring in most parts of the country, it may excuse me in attaching some importance to the present communication, and the attempt made to arrange notes relative to the form, progressive course, and therapeutics of the above-named epidemic. It is intended to prove, that continued fever in a rural district requires a different mode of treatment to that which it has been thought expedient to adopt in fever of the same type, attacking the inhabitants of over populated towns. These observations will generally consist of a series of facts falling within the range of my own practice, but occasionally referring to a different method of practice. The epidemic about to be described will be found to possess certain distinguishing characteristics, which may be attributed to the locality and habits of life operating favourably on patients, when compared with the results of epidemics of crowded cities. I am therefore desirous of putting others in possession of memoranda relating to continued fever in a midland district. We shall thus have an opportunity of drawing a comparison between this and the epidemics that have arisen at the same season, in various parts of the kingdom.

The unhealthy state of Rugby was first brought under our notice by a great number of persons complaining of either diarrhœa, or of common indigenous cholera. These forms of disease prevailed almost universally for about three weeks, and then were succeeded by cases having all the symptoms of gastro-enteritis. Some alarm was created as soon as it was knowu that two or three members of the same family, in several houses in the principal streets, were ill. In consequence, a sanitary committee was chosen, and the assembling of the school (for it was the vacation,) was postponed.

It may not be amiss to observe in this place, that when the premonitory sickness and diarrhœa were met by judicious treatment, the disease rarely advanced beyond a simple affection of the mucous membranes. The exhibition of doses of Hydrargyrum cum Creta, and saline aperients, or effervescing salines, with a due regard to the mildest diet, seldom failed to arrest the malady. On the contrary, when the dejections were suppressed by opium and other astringents,—when wine, or brandy, or cordials were taken, with the mistaken idea of comforting the bowels, febrile disorder was more fully developed, and greater mischief ensued.

On the 24th of August, the first public meeting was called, to consider what steps should be taken to prevent the spreading of the epidemic. This subsequently led to the adoption of some very proper sanatory regulations, such as are known to bave a tendency to mitigate the complaint, and to check the extension of a malady which had begun to invade all parts of the town. It is worthy of remark, that the poorer inhabitants resident in the worse parts were not the first victims of the epidemic; fever appeared in the families of tradesmen, and among the superior ranks of society. Some cases terminated fatally after an illness of eight or nine days; this, however, was not commonly the progress; such unhappy events were probably to be attributed to causes which we shall take occasion hereafter to discuss.

It is difficult to trace the epidemic to its first cause or remote origin. Some persons had no doubt about its arising from chokage of the sewers. An eminent engineer, who had been employed to make a survey of the town, with a view to improvements, had no difficulty in arriving at the conclusion that the complaint might be attributed entirely to bad drainage.* This is certainly an easy, but not a very satisfactory way, of accounting for the re-appearance of an epidemic after a long absence. There had been no epidemic fever since 1842. Those who were better acquainted with the history and statistics of medicine, although ready to admit that all facts that throw any light on the subject of malaria are highly important, yet were not satisfied with the preceding explanation. We ought not to leave out of our consideration the powerful influences of meteoric changes. "Mutationes defectionesque temporum maximè parient morbos." At least, it may be "worth while to bear in mind, the possible, if not probable, connection between epidemic disorders, and the outbreak of volcanic agency and electrical phenomena."†

* Mr. Austin's Report on the Improvements of Rugby, fol. 4.
† Dr. Arnold's Letters, p. 375.

Up to the present time we have, I believe, no clear insight into the origin of those periodic scourges which afflict mankind in the shape of epidemics. "The question of the origin of fever in such cases is far from being easily settled to the satisfaction of a philosophical mind."* Of this much we are certain, that free currents of pure air dilute and dissipate aërial poisons, so as to render them little hurtful, while confined air is the medium in which they linger, and the effluvium of organic decomposition becomes, if not the generator, the conductor of the fomites of infection.

It would be idle to occupy the attention of the reader by minute details, only so far as the febrile movement we are now contemplating, exhibited certain general features which we shall mention. Thus there were several degrees of intensity of fever, somewhat corresponding to synocha, synochus, and typhus; but as each class of cases was identical in its primary and principal lineaments, still for convenience of arrangement, we may consider them one and the same disease, simply acting with greater or less severity on the individuals attacked. Many encountered the first degree, the greater number the second degree, and not a few were affected by the third.

The following outline may serve to give a tolerable conception of the train of symptoms constantly presented, and by which the epidemic was immediately recognized:—The countenance expressed wretchedness of feeling, or stupefaction; coldness diffusing itself through the body very frequently, perhaps every quarter of an hour, was succeeded by heat, headache, frequent pulse, thirst, furred tongue, epigastric and abdominal pain, diarrhœa or occasionally an opposite condition of the bowels, the urine loaded with lithates. In all cases the fever, whether simple or more complex, had, as we may well suppose, many shades of intensity, and many varieties belonging to each division of cases. It is not needful to give formal definitions of the several gradations of fever, as each grade will be best exemplified by the recital of a few instances.

Fever of the first degree, was manifested by such symptoms as above, and had but a comparatively short duration. In some persons the vis vitæ, or the right appliances of medicine, were sufficient to prevent the noxious influences going beyond these limits, as the following cases will illustrate:—

Mrs. H., aged 34, after undergoing much anxiety and fatigue from the illness of two of her children, was suddenly attacked with creeping chilliness down the spine, aching in the loins, great thirst, loss of appetite. There was a scanty secretion of urine, which was remarkable, from its being coloured with hæmatosine. Now, although fever ranged no higher than the first degree in our pyrexometer, and only partially confined her to bed, yet it continued for five weeks, with little abatement, by which time her health returned.

Her husband also became affected. He had great irritability of the stomach and bowels, wandering pains in the limbs, white tongue, and an accelerated circulation. He dreaded confinement to his bed, and could not be persuaded to remain quietly at home. Happily his natural courage and pressing engagements as a practical engineer, employed on the railroad in adjusting the telegraphic apparatus, kept him much in the open air. For some days he endured much weakness, headache, and the concomitants of fever of the first degree, but he was perfectly well in a fortnight.

Cases of this grade were occurring in all parts of the town: young and old became afflicted. The febrile impression was not serious, though not soon subdued.

The epidemic in the second degree differed from the first chiefly by its greater intensity. The patient at the early stage had a deep flush on the cheeks, alternating with paleness; dry skin; thirst; thick drab-coloured secretion covered two-thirds of the tongue; the pulse rapid, *i.e.*, from 110 to 130; urine turbid. Uniformly there was a certain amount of cerebral disturbance, indicated by moaning or crying out, with sudden sharp pains. A restlessness and delirium existed in most cases, and led one to suspect meningitis. After the subsidence of the latter symptoms one might observe there was marked pervigilium, which was succeeded by unusual torpor.

Sir H. E., aged 17, complained of headache, shiverings, a total want of appetite, and great lassitude. He had white brown tongue, frequent pulse, and pain in the epigastrium. This attack lasted three weeks, but throughout the whole period his state might be considered free from danger. He possessed a good constitution and could weather the storm. It was far otherwise with those who had serious organic affections at the time of the attack of fever; with such there were few chances of a favourable issue.

A lady, aged 29, of a lymphatic temperament, had been in delicate health for the last two years, from chronic dysentery; but having been on a visit into Devonshire, she returned to her home, at Burbage, convalescent. Fever prevailing in the village, soon after her arrival, she became affected by it, and although the disease attained the second degree only, general œdema was consequent, and she died the fourth week from effusion into the head and chest.

A child, aged 4 years, with disproportionately large articulations of the limbs, always pale and thin, was seized with the same fever. On the 11th day there was strabismus, dilated pupils and convulsive movements of the right extremities. The case ultimately assumed the worst form of hydrocephalus, and terminated fatally on the twenty-second day.

A young man, aged 19, had not long recovered from lumbar abscess. He had slight cough, but he was able to follow his employment as writer in the office of a solicitor. After falling with fever, a discharge was reproduced from the old cicatrix in the loins, and on the seventeenth day from his taking to his bed, he sank. An examination revealed grey tubercles in the lungs, as the remote cause obstructing his cure.

* Dr. Christison, in "Library of Medicine," Art. Fever.

I have not known fever of the second grade carry off the patient, unless, as in the cases just recited, it was complicated with a pre-existent morbid state of body. There might, however, be local disease, not having any bad influences, as it respects the fever.

J. B., aged 20, had disease of the knee-joint for two years, when he was seized with fever, which lasted for three weeks. The one disease had no apparent effect on the other in retarding the cure. He soon afterwards went to his work as a smith, with merely the inconvenience of anchylosis of the joint.

To form a right conception of the third degree of this epidemic in all its circumstances, we ought to suppose the patient to have imbibed a concentrated malaria, subjugating every organ and function to a typhoidal influence.

I will transcribe from my notes the case of a fine young woman, aged 20, who, when I first saw her, had been ill three weeks. Her face had the expression of subdued suffering; sordes on the lips and teeth of a deep blood colour; tongue covered by a thick and dry mucus of the same appearance. A dark shade surrounding the eyes indicated the sunken contents of the orbits; at the inner angles the veins were blue and prominent; the pupils somewhat dilated, and the eyelids half closed; alæ of the nose moved in each respiration; the expirations quite audible; crepitant rhonchus; cough, and a rusty mucous expectoration. It required considerable tact to count the pulse, as it was small, and between 130 and 140, certainly not less than 130. She at one time complained of pain in the chest, at another in her bowels. The hpyogastric region was, on pressure, extremely tender. At a more advanced period of the disease this patient became deaf, and took not the least notice of anything passing in her bed-chamber. Unconscious of her danger, wants, or necessities, she was unable to appreciate the concern and attentions of her dearest friends. Thickly folded clothes were placed under her, and attendants administered to her comfort just in the same way as to the most helpless infant. She could only take fluids; as to food of any kind there was a total distaste, as also for every mental and physical enjoyment. The functions of the endermic system, being too feeble to throw off the secretions, the skin became dry. We might now view this patient at the maximum of the epidemic, and altogether a worn-out emaciated being. This case recovered, although it was three months before the enervating effects of the malady disappeared.

The vital powers in persons of advanced age were unable to contend with fever of this type.

Mrs. G. B——, aged 77, fell with fever. In the second week her arms and legs became livid; there was extensive sloughing over the sacrum, and on the fifth week she expired.

From four to six weeks generally elapsed before there was any permanent remission, when the grievous complaints of pain in the back, or limbs, or bowels, were succeeded by a profound sleep, which when undisturbed lasted from six to eighteen hours. There were instances of quiet slumber for three days. The friends of the patient were inclined to arouse them: they were wrong; this deep sleep ought not to be interrupted, for invariably a favourable event followed. It was critical, and marked that crisis which ended in copious perspiration, grateful sensations, and an abatement of vascular excitation. Indeed, this extraordinary repose and repeated diaphoresis was not uncommonly the precursor of convalescence; the appetite at the same time returning, the physical powers were gradually recruited. Nevertheless, it was from three to four months before the health was perfectly regained.

Another distinguishing feature of the epidemic was,—that in no case which came under my observation could it be said to be ephemeral; in its mildest attacks it long held the sufferer within its grasp. We had also abundant opportunities of remarking how much a pure air, and the habits of country life, give superior powers of endurance under disease. That such circumstances should modify, if not the material of fever, yet that it modifies the effects of fever, is more than conjecture. There can be no doubt that the physical condition of a rural population, living in comparative comfort, would form a striking contrast with the physical condition and powers of endurance of persons living in large towns. Those who have been the subjects of the visitation of an epidemic, under wretchedness and privation, have their vital powers fail at the first onset. Whereas, in our neighbourhood, we have been frequently astonished at the tenacity and conservation of human existence under morbid phenomena so excessively enfeebling. When the subject of fever has been free from previous organic change, and not greatly advanced in life, the epidemic had a tendency to run its course without hazard to life. Cases in my practice have never been fatal, unless the patient at the time of the attack laboured under serious disease, or the disadvantages of old age.

(*To be continued.*)

ON THE EMPLOYMENT OF THE POWER OF ELASTICITY IN SURGERY.

By Henry Clark, Esq., F.R.C.S., Surgeon to the Infirmary, Bristol.

(Read at the Annual Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, held at Bristol, July 22nd, 1847.)

I am anxious to call the attention of the members of the profession to a power which may be advantageously exercised in surgery. Although it has not been entirely overlooked, still its application has been very limited; in some of the cases to which I shall refer, I am not aware that it has ever been employed.

The power I allude to is elasticity. This principle is unceasingly exerted in the human economy. By virtue of its influence the vessels are enabled to accommodate themselves to their varying contents. By its instrumentality those slender encircling bones, the ribs,

have their integrity maintained, and are enabled to defend from any rude concussion the important organs they surround. Whenever we flex the trunk, the intervertebral elastic plates assist the muscles to restore the column to the upright posture, and afterwards to maintain that attitude without the expenditure of continual muscular effort. We walk upon an elastic arch, and every section of the bony apparatus of our limbs has more or less of elastic material interposed between and around them, so that when any member is exercised, by this agent it is greatly aided to resume its normal position. The skin and other tissues partake of its advantages; indeed, deprived of the elastic principle, life would be almost intolerable, and our movements, which are now performed with celerity and comfort, would, in the absence of this agent, become both irksome and dangerous.

I should however outstep my province were I to do more than illustrate the general use of elasticity by a few leading particulars. I have glanced at a few, that your minds may be suitably impressed with its extensive agency, and that you may be induced to set a proper estimate on the value of its influence.

We cannot accurately imitate muscular contraction; we cannot supply a principle precisely analagous to the nervous fluid; but we can supply the elastic property, and thus, in a variety of instances, help nature exactly in her own way. Nature abhors being treated abruptly. Where you cannot advantageously use coercion, you may beneficially exercise forcible persuasion. In mechanical surgery the rack and the screw I allow are powerful and useful instruments, but still they are felt as obnoxious agents, while the elastic media are recognized as the true natural allies. Vulcanized caoutchouc has this desirable elasticity, and similates most closely this property of the living animal tissues. This is the medium that I would propose to be used. In its operation it will be found to exhibit the *fortiter in re*, and at the same time to exemplify the *suaviter in modo*—a happy combination, which in physics, as well as morals, is the great clue to the attainment of our object. By the great power of the screw or the rack we may suddenly overcome, and subsequently rigidly maintain the position gained, but it is only by occasional starts that progress is made, and there is nothing natural in the process. The elastic medium on the contrary, when once applied, is perpetually at work, and, like the drop of water that excavates the stone, not by its own inherent force, but by its unceasing action, so the caoutchouc, not by its native strength, but by its untiring exertion, is enabled to accomplish purposes which the fitful action of a stronger power is incapable of effecting. The one is an energetic sleepless sentinel ever active on duty; the other a powerful but dormant guard requiring to be aroused to efficient service; and this is not the only distinction, for the presence of the one in the human economy is viewed as that of an enemy, while the assistance of the other is regarded as that of a friend.

I would wish to be clearly understood that I do not aim to discard the use of the screw and other similar powerful mechanical instruments from surgery. There are cases I know where these means are indispensable. I only desire to express an opinion that in numerous instances where that kind of power is exerted, the elastic principle would be more appropriate, and that to this mode the motto may be most aptly applied—

"Cito tuto et jucunde."

Hitherto the caoutchouc has been principally used in surgery as a compressor; the novelty of my idea—if it have that claim—is in using it as a tractor, and in estimating its power in this respect at a much higher rate than others have hitherto done.

I will without entering into detail enumerate a few instances in which it has been found to act with marked benefit.

In lateral spinal curvature.

In bending rigid joints and straightening them when contracted.

In the removal of long portions of dead bone from the soft parts, and in withdrawing a sequestrum from its osseous shell.

In the removal of ligatures when they have been detained beyond the accustomed period.

In opposing the tendency of the cicatrix to contract after burns.

PURULENT OPHTHALMIA IN INFANTS.

By James Whitehead, Esq., F.R.C.S., Surgeon to the Manchester and Salford Lying-in-Hospital.

(Read before the Provincial Medical and Surgical Association, at the Anniversary Meeting, at Derby, Wednesday, August 4th, 1847.)

Purulent ophthalmia, as it is met with in infants, is of such frequent occurrence, and occasionally so disastrous in its consequences, that the subject will, doubtless, be allowed to possess considerable interest and importance in a medical point of view; and the uncertainty which has hitherto prevailed respecting its origin, and the means to be employed for its effectual prevention, appears to leave its history open at least to further investigation. The facts which I have to adduce are intended to bear directly upon this disputed question; and although scanty, and by no means fully digested, I am, nevertheless, emboldened to bring them under the notice of the Association on the present occasion, believing that any trifle capable of contributing to the elucidation of an obscure point in pathology, may not be deemed unworthy of being communicated.

The first indication of purulent ophthalmia consists in simple turgescence of the vessels of the conjunctiva, upon which membrane granulations are soon after seen to spring up in great abundance, and a very profuse secretion of pus ensues. This product has the property of generating a similar train of morbid phenomena on being applied to the eye, or to the mucous structure of some other organs, either of the same, or of another individual.

The inflammation is generally found to attack, in the first instance, the layer of membrane lining the

lower eyelid; at other times it commences in the ocular portion, and rapidly extends to some of the deeper structures of the eye. The cornea, owing, perhaps, to its peculiar anatomical construction, is especially liable to become early implicated. When the affection is severe, lamella after lamella of this part of the organ is destroyed, and in a very short space of time the whole is perforated by the diseased action, and loss of vision is the inevitable consequence. I have several times witnessed this lamentable consummation upon raising the eye-lid, on the occasion of the little patient being first presented for treatment, on the fourth, fifth, or sixth day after birth. Perforation of the cornea is accomplished at an earlier date in those cases wherein the disease commences in the ocular, than when it has its origin in the palpebral portion of the conjunctiva.

Purulent ophthalmia, as regards the date of its commencement, appears under two different aspects. In the first place, its invasion is observed at any period from the moment of birth, to the end of the fourth or fifth day; secondly, it commences from the last-named age, to that of ten or twelve weeks, or later. The great majority of cases, however, are brought under treatment on the second or third day after birth; and I have often witnessed evidences of the existence of the malady a few hours after delivery. The two forms of the complaint now mentioned, which, for the sake of distinction, may be designated *primary* and *secondary* purulent ophthalmia, are also different, the one from the other, in character, the disease being much more acute, more rapid in its course, although at the same time, perhaps, more easily controlled by remedies, if early applied, in the former, than in the latter form. Under both circumstances, it owes its origin to the same agency; but this, in the one case and the other, operates in different ways.

The *causes* of purulent ophthalmia have been variously stated by authors who have written on the subject. The cases which I now adduce, however, happened in the children of parents in whom a particular morbid condition of the uterus existed previously to the birth of the child. In the thirty-five cases, an abstract of the histories of which is given in the appended table, inflammation or ulceration of the lower part of the uterus of the mother was known to have been previously present. It is reasonable to presume therefore, that the disease, in its *primary* form, owed its existence to the direct application of the morbid secretion to the organ affected, and that the inoculation took place on the transit of the infant through the uterine orifice during parturition.

Mackenzie appears to have been sufficiently aware of the fact, that purulent ophthalmia in infants depends, in many instances, upon virulent inoculation during parturition, as he states, at page 432 of his work, second edition, that "it will in general be found, that when the child becomes affected with this ophthalmia, the mother has had leucorrhœa before and at parturition, and that the eyes have not been cleared for some time after birth." This author does not distinguish, however, between one kind of leucorrhœa and another,—between simple catarrh consequent upon vascular excitement, without abrasion of texture, and that which is occasioned by ulcerative or inflammatory action, resulting in the secretion of pus. All the cases of this affection which have occurred in my practice, where an opportunity has been afforded for prosecuting the necessary inquiries, have happened in children whose parents laboured under such disordered state of the lower part of the uterus, visible to the eye by aid of the speculum.

Secondary purulent ophthalmia appears, more remotely, to be dependent upon the same agency. The case marked, No. 18, which was said to have commenced at the age of three weeks, was attributed by the parent to the application of cold. The child was brought under treatment when between ten and eleven months old. Its mother had yellow leucorrhœa, with all the sympathetic disturbances usually attendant upon uterine disease, the symptoms having existed upwards of eighteen months previously. She had fissured ulceration and induration of the cervix uteri. It is highly probable that the fœtal system becomes imbued with the morbid product during its intra-uterine life. In such instances the mischief may manifest itself at any period after birth, its seat being determined by the application of cold or other cause to the part upon which the diseased action becomes determined.

Of the virulent nature of the secretion furnished by diseased surfaces situated near the lower part of the uterus, independent of specific causes, there cannot be a doubt, as may be proved by the occasional occurrence of all the phenomena of blenorrhagia in the male subject from inoculation, under such circumstances, effected during coition. The fact is further proved, moreover, by my own experiments upon dogs,* in whom a similar form of inflammation was produced on the matter being directly transferred from the human uterus to the eyes of these animals. A similar form of inflammation is sometimes witnessed in the ear, the nose, the vagina, or around the anus, instead of the eyes, in infants; and it is highly probable that this also originates from the same species of inoculation.

With a view to the prevention of this destructive malady, it is of the first importance, whether disease of the maternal organs be suspected or not, that the eyes of the infant be perfectly cleansed and washed immediately after delivery. If it be possible, the uterus of the mother should be restored to a healthy state before delivery takes place. For subduing the inflammation when once established, the most efficient plan with which I am acquainted, is the free application of the solid nitrate of silver to the inside of the lower eyelid, as first recommended by my esteemed and lamented friend the late Mr. Walker.* It may be remarked that cases of this character generally require constitutional as well as local treatment.

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* See "Abortion and Sterility," case xxxi.

* "Oculist's Vade-mecum."

TABLE,

EXHIBITING AN ABSTRACT OF THE HISTORIES OF THIRTY-FIVE CASES OF PURULENT OPHTHALMIA IN INFANTS.

	Age of the Mother.	*Number of pregnancies, including Abortions.*	*Number of Children previously affected with Ophthalmia.*	*Age of the Child.*	*Results.*	*Character of the Vaginal Discharge.*	*State of Uterus, ascertained by Speculum.*	*Nature & alleged Origin of the Uterine Affection*
1	24 yrs.	2 ..	1 ..	2nd day	Cured	Muco-pur.	Fissured ulceration	Sporadic.
2	30	8 ..	3 ..	2 hours	Cured	Ditto	Superficial ulceration	Ditto.
3	26	2 ..	1 ..	4th day	Complete opacity of one cornea	Ditto	Ditto	Ditto.
4	27	3 ..	0 ..	36 hours	Cured	Ditto	Ditto	Ditto.
5	31	6 ..	1 ..	36 hours	Cured	Ditto	Ulcern., diffuse inflam., endo-cervicitis	Gonorrhœa.
6	26	5 ..	1 ..	3rd day	Cured	Ditto	Granulating ulcer	Exposure to cold.
7	41	16 ..	8 ..	12 hours	Cured	Sanious	Endo-cervicitis, chronic	Suppressio mensium
8	26	0 ..	0 ..	2nd day	Cured	Muco-pur.	Superficial ulceration	Sporadic.
9	26	5 ..	1 ..	2nd day	Cured	Ditto	Excoriation	Ditto.
10	24	3 ..	1 ..	36 hours	Cured	Ditto	Granul. ulcer, endo-cervicitis, aphthæ	Syphilitic.
11	25	7 ..	0 ..	2nd day	Cured	Ditto	Superficial ulcer	Sporadic.
12	30	7 ..	0 ..	2nd day	Cured	Ditto	Ditto	Ditto.
13	28	4 ..	1 ..	2nd day	Cured	Ditto	Circumscribed granulating ulcer, endo-cervicitis, aphthæ	Syphilitic.
14	28	4 ..	0 ..	36 hours	Cured	Ditto	Granulating ulcer	Strumous.
15	25	5 ..	0 ..	30 hours	Cured	Ditto	Ditto	Sporadic.
16	31	6 ..	5 ..	2nd day	Cured	Ditto	Fissured ulceration, induration	Syphilitic.
17	26	3 ..	0 ..	2nd day	Died emaciated, aged 5 weeks	Ditto	Spongoid ulcer	Sporadic.
18	30	7 ..	0 ..	3 weeks	Cured after 12 months existence	Ditto	Fissured ulceration, induration	Ditto.
19	33	6 ..	0 ..	4th day	Cured	Ditto	Granulating ulcer	Ditto.
20	36	8 ..	1 ..	2nd day	Cured	Ditto	Ditto	Ditto.
21	26	4 ..	0 ..	3rd day	Cured	Ditto	Ditto, aphthæ	Syphilitic.
22	23	3 ..	1 ..	2nd day	Cured	Ditto	Ditto, ditto	Ditto.
23	19	1 ..	0 ..	2nd day	Cured	Ditto	Ditto, ditto	Ditto.
24	26	6 ..	1 ..	3rd day	Cured	Ditto	Simple ulceration	Sporadic.
25	30	6 ..	0 ..	2nd day	Cured	Ditto	Ditto	Ditto.
26	34	8 ..	3 ..	3rd day	Cured	Ditto	Ditto	Ditto.
27	30	7 ..	1 ..	3rd day	Cured	Ditto	Ditto	Ditto.
28	29	3 ..	1 ..	3rd day	Cured.—Died aged 9 weeks	Purulent	Ditto, and diffuse inflammation	Gonorrhœa, strumous.
29	30	5 ..	1 ..	2nd day	Cured			
30	22	2 ..	1 ..	1st day	Died uncured, aged 8 days	Sanio-pur.	Simple granulating ulcer	Sporadic.
31	27	4 ..	1 ..	3rd day	Cured	Muco-pur.	Ditto	Ditto.
32	39	12 ..	6 ..	2nd day	Cured	Ditto	Ditto	Ditto.
33	32	4 ..	1 ..	40 hours	Cured	Ditto	Ditto	Ditto.
34	40	11 ..	1 ..	3rd day	Cured	Ditto	Ditto	Ditto.
35	35	4 ..	3 ..	2nd day	Cured	Ditto	Ditto	Ditto.

CASE OF CALCULUS IN A FEMALE, EXTRACTED BY DILATATION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

On Tuesday, the 17th of August, two stone operations took place at the Lowestoft Infirmary, one patient was a boy, 8 years old, the other a female, aged 19, from the neighbourhood of Cromer. As the calculus removed from the female was of rather large dimensions, and accomplished with great facility by means of *dilatation*, I am induced cursorily to notice the case in your Journal.

Many of our best surgeons are divided in opinion as to the safest mode of extracting calculi from the female bladder. There are some who deem an incision the best practice, and who assert that the use of the knife is less frequently followed by incontinence of urine than when dilatation is employed. Stone in the female bladder not being of frequent occurrence, experience does not permit me to offer a decided opinion on the subject. I am enabled, however, to state, that in a couversation which I had the privilege of holding with Mr. Crosse, of Norwich, a few days after the operation, he informed me he had had repeated experience of both ways of proceeding to relieve a female patient of stone in the bladder; and that he was fixed in the opinion that *dilating* is to be preferred to *incision*, when the calculus is of moderate size, and even when the size of the foreign body cannot be satisfactorily estimated, or is believed to be large, he prefers commencing by the dilating process, until the finger can be freely admitted into the bladder, when cutting can then be practised to the extent required. The dilatation, he moreover remarked, should be effected slowly, and most gradually, and uniformly; when these rules have been observed, he has known the power of retaining the urine permanently re-established after the removal of calculi, the smallest circumference of which measured from four and a half to five inches.

In the case which came under my own notice I employed Weiss's dilator. The process of dilatation was commenced at eight in the morning; at the end of every two hours I visited the patient for the purpose of giving the screw of the instrument from a quarter to half a turn. By six in the evening the urethra was sufficiently dilated to enable me with facility to introduce the index finger of my left hand into the bladder, and to feel a calculus, which I judged to be of considerable size. By the aid of a pair of moderate-sized lithotomy forceps, I easily embraced it, and then cautiously and gradually commenced its extraction, which was effected at the end of about half an hour. It proved to be of the mulberry kind, of an egg shape; its longest circumference measured four inches and a quarter, its shortest three inches and three quarters, and it weighed exactly an ounce.

For about ten days after the operation there was more or less incontinence, but after that period it gradually decreased, and the urine could be retained from four to six hours. On Saturday, the 4th of September, she was discharged cured.

Nothing particular occurred in the course of the operation performed upon the boy. A calculus was extracted, composed of the triple phosphate, which weighed one drachm.

I may here remark, that upon every occasion in which I have been called upon to cut for the stone, I have scrupulously avoided the employment of any kind of gorget, and that the last twelve patients, whose ages have varied from sixty-eight down to two and a half years, have been operated upon successfully.

I remain, Sir,

Your obedient servant,

W. C. WORTHINGTON, F.R.C.S.,

Senior Surgeon to the Lowestoft Infirmary.

September 14, 1847.

CASE OF CATARACT OCCURRING IN EARLY LIFE.

By AUGUSTIN PRICHARD, Esq., Surgeon, Bristol.

(Read at the Annual Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, held at Bristol, July 22nd, 1847.)

At the December quarterly meeting of this Association, in the year 1845, I had the honour of introducing to the notice of the gentlemen present a country lad, 17 years of age, who had been the subject of congenital cataract, and upon whom I had operated about three days previously. The case terminated by the boy having fair sight with one eye, sufficient to enable him to work in the fields by digging potatoes, and to look after horses. Beyond this he had no ambition, and he was so satisfied with his acquirements that I could not induce him to learn a single letter. I have recently been fortunate enough to meet with a much better case, which I will lay before the Society, relating all the particulars as I noted them down at the time, with the remarks of the patient in her own words.

Ann Harris, aged 27, was brought from Abersychan, beyond Pontypool, to the Eye Dispensary, and was admitted a patient on the 16th of June.

She had good sight when she was born, but in her third year she had a severe attack of small-pox, which destroyed the left eye, and from that time the right began to fail. The right eye also suffered from the same attack, which has left a slight central corneal opacity behind it.

When she was admitted the left eye was completely sunk; the right presented a fully-formed white cataract, with the corneal opacity, and a remarkably healthy and active iris. She has been blind (or nearly so,) for twenty-four years out of the twenty-seven which she has lived. She could make out the colour of objects when held very close to her eyes. She is very intelligent and quick, and her memory is good. She has been in the habit of doing all the baking and washing of her mother's house, and her mother whose sight is now failing from old age, is accustomed to

apply to her blind daughter to have her needle threaded; this she performs in the ordinary way for blind persons, *i.e.*, with the help of her tongue. She is very religiously disposed, and told me a few days ago that she had always believed that she should receive her sight in answer to her prayers. Her friends objected to her coming to Bristol until she had expressed her determination to come alone, to try what could be done for her sight; they considered that as she was born blind she ought to remain so, from a degree of misdirected faith, which was the cause of her blindness, for when we asked her how it was she had not been vaccinated, the answer was, "Her father objected: that if it pleased the Lord that she was to have the small-pox, he had no right to do anything contrary to His will."

She knew, of course, everything by touch, and could partly see the form of her hand when it was held between her eye and the light. She had also been able to see the moon on bright nights, but its form had always appeared the same, whether it was full or not. She was thus able, *besides colours*, to distinguish by sight what was *round*. She also knew what was *long*. She is, moreover, rather imaginative for a person in her situation in life; for whilst she maintains that she has no recollection of having seen more than the light, she says that she has "fancied" objects, and that they have been shewn to her in her dreams, and in her mind's eye," as they had previously been described to her. She says that she has in this way seen in her dreams all common objects, such as plates, knives, &c., and also flowers; and that she has seen the bible, open, with the print coming to within a finger's breadth of the margin of the paper.

She has a considerable enlargement of the thyroid body upon the right side, and I may here remark, that she is the third female patient who has been cured of cataract by operation from the same village within the last three years, and that they were all the subjects of bronchocele.

I operated upon her eye upon the 17th of June. The pupil was, as usual, previously dilated by means of belladonna. It is of course unnecessary to detail the steps of the operation, in which there was nothing very unusual; the object was to rupture completely the anterior capsule of the lens, to break up the cataract, and to remove, if possible, some portions of it out of the axis of vision. The lens was rather brittle. At the close of the operation the eye was left with a clear space in the centre of the pupil, with a solid portion of the lens below, and two or three lacerated portions of capsule rather projecting into the anterior chamber. During the operation her eye was of course exposed to a tolerably strong light, opposite the window, but afterwards the room was darkened, and she was placed for a few minutes with her back to the window. When she was allowed to open the eye, after the lapse of about five minutes, she was in raptures at the new scene, and said "Oh! God be praised, I see hundreds of windows, white and light, and so bright, all around me." There was then no window in sight, and I therefore attributed this expression to the impression of the strong light during the operation. She however recurred to it herself two or three days ago, and told me, that upon consideration the white light must have been the bosoms of the shirts of two or three gentlemen who were standing round her, for it was not light enough for a window, as she had afterwards learnt to see it. She was told to look at her hand. She held it up, and said, "I see my hand, and the fingers; they are so thick, and so long. And I see my arm." A watch was swung backwards and forwards before her eyes at some distance, she said "I see things moving about, all white and blue; I am in a new world." It was not considered prudent to try her eye any more at this time, and it was therefore tied up in the usual way, and she was put to bed.

When I visited her in the evening, she had had some little pain in the back of her head, but her pulse was quiet. She told me that she had nearly fainted when we left her in the morning, for she was so "terrified at seeing her fingers, how long they were." The next day she had considerable intolerance of light, as might have been expected, but she had no bad symptoms.

On the 20th of June, (*i.e.*, on the third day after the operation,) I found her sitting up, but with her eye still covered. She could now bear the light pretty well; the room was of course still kept almost dark. I showed her my walking stick; she knew that it was long and whitish, but she did not know what it was until she felt it. I held an open book before her; she knew that it was longer in one direction than the other, but she could not name its shape; she also saw that it was darker in the centre, but that about the edge all round it was white. She could not tell what it was. She thus described the book as she saw it, without knowing what it was, almost in the same words as those by which, before the operation, she had described the book as she had been taught. She had no power of connecting what she now saw with what she previously knew, by touch and by description, proving that although she said she used to see the bible with her mind's eye, and was able to tell in words what it was like, it was necessary for her to have real experience of it as it actually appears to the eye, before her brain was able to connect the idea already formed with the impression made on the sensorium, through the medium of the optic nerve.

I told her to put up her hand to the object which I held before her, and she then at once said it was a book; and from that time she always knew a book when I held one before her. She could see the patchwork quilt upon the bed, even although the room was very dark.

On the 21st I shewed her a plate; she knew that it was white and round, but did not know what it was. I showed her a book; she told me at once what it was; she said that a shilling looked different from a sovereign, and that the latter was like the moon. She did not know what they were until she took them in her hand. She says she expects to see the stars "like sparks in the sky."

23rd. The sixth day after the operation. Her eye is now able to bear a considerable amount of light; she has been since the 21st busily employed in looking about the kitchen where she sits, and she now knows

most ordinary articles, and many flowers. She does not forget anything which she has once seen. She could not distinguish a plate from a saucer.

28th. It is now rather difficult to find a common article which she does not recognize. I held up one of my gloves with the fingers spread out, and asked her what it was. She was puzzled for a time, but at last she guessed "a pair of gloves." Now this she had not seen before, but she knew the form of the hand and its colour, and she could see that the glove was not my hand, for I held it up to her, and she could also see that it had the shape of the hand. And thus within little more than a week after the operation, she could put together her experience so as to make out that the object which I held before her was a glove, or as she called it, "a pair of gloves."

July 2nd. A fortnight after the operation. I found her walking in the court. She could see the flowers, and could count the buds upon a rose tree at the distance of a few feet; and she could see the yellow anthers of a white lily, and the separate petals.

5th. She took a walk through the city and was very much interested by seeing the shoes, hats, watches, &c., in the shop windows. She pointed them out herself, and knew them at once, and described them to me afterwards, expressing great pleasure at being able to distinguish them.

8th. She was shewn a dove: she soon learnt to know it, and she could distinguish the ring round the neck. She expressed great delight that the first bird which she saw should be a dove, as she had heard so much about the dove and Noah's ark. She can see the windows of the houses at a considerable distance, and could distinguish that some were open and others shut, and she could see something moving in one of them,—this was a child at play.

12th. She continually says that she is ashamed to look any one in the face. Whenever she attempts it she begins to laugh. When she was shewn a portrait painted in oils, of the size of life, she could distinguish the eyes and nose, but she began to laugh in the same way. Among the plates in a work upon Natural History, she recognized at once the picture of a bird, and pointed out its head and tail, (for she had learnt birds, having seen a dove,) but she could not tell a fish. From a drawing-room window she pointed out a horse and carriage, passing up the street, and said that there was a lady in the carriage. I shewed her the picture of an Indian, with a thick club in his hand; she said it was a man with an umbrella.

It is now upwards of a month since the operation, and the state of her eye is as follows:—There is a portion of perfectly clear pupil in the centre, and at the external part of the pupil, through which she sees. The most solid piece of the lens is below, and is gradually diminishing by absorption. The corneal opacity is in *statu quo*, and seems to be of but little consequence. The sight improves considerably from one week to another; a four-inch convex glass, which brings the rays to a focus upon the retina, very much improves the powers of vision, with it she can see to distinguish large letters from one another, although she does not as yet know any of them.

She has been sent home, with directions to return in two or three months' time, when the lens may be expected to be absorbed, and then she will be furnished with a suitable glass, and I feel no doubt that if no unforseen accident occurs, she will learn to read and write in a very short time, and to do everything by her sight, as well as she has hitherto done by means of the sense of touch.

OBSERVATIONS ON PLACENTA PRÆVIA.

By John Jones, Esq., Surgeon, Derby.

(Read before the Provincial Medical and Surgical Association, at the Anniversary Meeting, at Derby, Thursday, August 5th, 1847.)

It is upwards of seventy years since the following rules of obstetrical practice were promulgated in this country by the late Dr. Rigby:—1. That in cases of hæmorrhage, caused by presentation of the placenta, the safety of the mother, and probably that of the child, can only be secured by early and cautious delivery, by the operation of turning. 2. When hæmorrhage occurs during labour, without presentation of the placenta, rupturing the membranes is usually sufficient to restrain it.

From the time of Dr. Rigby's invaluable "Essay on Uterine Hæmorrhage," published in 1775, till recently, the above rules have been considered the established and only authorized guides of practice under circumstances of the most appalling responsibilities in which the practitioner can be placed; and in innumerable instances, supported by the assurance that security can only be obtained by turning, he has performed the important duties imposed upon him with firmness and efficiency; and in most cases when the operation has been judiciously and cautiously performed, has been the happy means of rescuing the mother, and not unfrequently her offspring, from inevitable death.

"On this subject," Dr. Blundell observes, "the general rule is that you should introduce your hand into the uterus as soon as you safely may, and that you should abstract the child by the operation of turning. On this point there can, I presume, be no difference of opinion amongst competent judges, at least in the present state of knowledge, so that the mind is not here, as sometimes, distracted or disturbed amongst a variety of practices, each of which may have nearly equal claims to its adoption."

The practice of turning in placental presentation, if adopted sufficiently early, not too hastily, and with all necessary caution, is very generally successful. That fatal cases should occasionally occur where such great dangers exist cannot be matter of surprise. The life of the patient in these cases is peculiarly in the hands of the practitioner; if he is inexperienced, too anxious or timid, has never before attended a case

of placenta prævia, and the rule of practice is not clearly defined and well understood by him,—if his mind is distracted or disturbed by having a variety of practices presented to it, each of which may have equal claims to adoption, he becomes undecided, vacillating, and temporizing,—he delays adopting the mode which affords the best chance of saving the life of his patient, and allows her to sink without having been delivered, or, perhaps, performs the operation of turning when her energies are too far expended, and under such a state of exhaustion, his very haste to deliver accelerates the fatal catastrophe.

The usual causes of failure in performing the operation of turning are:—1. Waiting too long for the dilatation of the os uteri before commencing the operation. 2. Too great haste in performing the operation.

1. *Waiting too long for the Dilatation of the Os Uteri.*—However unanimous the profession has hitherto been in considering turning the right practice in placenta prævia, teachers of obstetrics have differed as to the proper time for performing the operation.

The following directions are given by professors:—Dr. Hamilton says, "If possible, delivery should never be attempted till the os uteri be dilated, and the membranes begin to protrude." Dr. Burns says, "Whenever we find the os uteri softer, and in any degree more open than its usual state, and it admits the finger to be introduced easily within it, we may deliver safely, and if the hæmorrhage be continuing ought not to delay." Dr. Merriman observes, "It is necessary that there be a certain degree of softness and dilatability in the uterus; but the dilatability is not always to be judged of by the actual dilatation of the part, for sometimes in hæmorrhage, the os uteri will be very capable of being dilated by art, though it hardly seems sufficiently open to admit a single finger." Dr. Lee says, "It is seldom safe to attempt delivery by turning before the os uteri is so far dilated that you can easily introduce the points of the four fingers and thumb within it, however soft and relaxed it may be. Until dilatation has commenced and proceeded so far, I am convinced there are very few cases in which the operation will be required or completed without the risk of inflicting some injury on the os uteri."

That such discrepancy of opinion should exist amongst the teachers of midwifery on a subject of so much importance, is greatly to be lamented, and must tend to produce in the practitioner indecision and delay, at a time when firmness, promptitude, and decision can alone give security to his patient.

As the hæmorrhage usually occurs between the sixth and eghth month of pregnancy, and there is no probability of preserving the life of the child before the seventh month, it becomes desirable, of course, to postpone delivery till after that period; therefore, if the os uteri be but slightly patent, the hæmorrhage recurring but not continuing long, delay might be justifiable and we might rely on the plug and other usual means for restraining the hæmorrhage. But as the reasons for delay refer principally to the safety of the child, and the life of the mother is continually in danger till delivery is effected, if the os uteri be soft and dilatable, although it may not admit more than a single finger, and if the hæmorrhage continue unabated, and consequently the danger urgent, the operation of turning should immediately be performed. Hæmorrhage has a direct tendency to relax the os uteri and render it more dilatable, consequently a rigid os uteri, co-existing with dangerous hæmorrhage, might be considered a rare occurrence, and can seldom be sufficient cause for delay when the hæmorrhage exists to a dangerous extent.

2. *Too great haste in performing the Operation of Turning.*—If delivery has been delayed till the energies of the system are greatly expended, and symptoms of exhaustion are induced, the danger of turning becomes proportionably great; and inconsiderate haste in effecting delivery under such circumstances, is not unfrequently followed by the speedy death of the mother, after having given birth probably to a dead child. As the introduction of the hand into the uterus usually restrains the hæmorrhage by exciting uterine contraction, and also by mechanical pressure on the placenta, there can be no just cause for haste; on the contrary, the safety of the patient depends on the slow, cautious, and deliberate efforts in performing the operation of turning, so as to effect delivery *without reference to time*, but solely with the view of supporting to the utmost extent the nearly exhausted energies.

Eleven cases of placenta prævia have come under my immediate observation, out of which only one terminated fatally.

The first occurred many years since, in which the hæmorrhage produced such a state of exhaustion, that I expected the patient would have died during the operation of turning. Very cautiously introducing my hand, scrupulously avoiding haste, alternately working and resting, and thus allowing time for the energies to be recruited, which in this case was of the utmost importance from the extreme exhaustion of the patient, and after continued efforts of about four hours duration, delivery was at length effected. She recovered without any unfavourable symptoms, and the following year was again pregnant, and safely delivered of a healthy child, without the occurrence of any untoward circumstance.

In another case the hæmorrhage had occasionally recurred for some weeks previous to delivery, but was of short duration. At length it became more profuse, and was accompanied by symptoms of labour; the os uteri was dilated to about the size of a shilling, soft and dilatable. Turning was easily effected, and the mother was safely delivered of a living child.

Two other cases occurred in one individual about the sixth month in two succeeding pregnancies. Turning was easily accomplished without being followed by any unfavourable symptom. In another case the placenta was partially attached over the os uteri; the hæmorrhage, which was profuse and alarming, immediately ceased on rupturing the membranes, and delivery was speedily effected.

In all the cases, excepting the one which terminated fatally, delivery was commenced when the os uteri was

dilated to not more than the size of a half-crown-piece, and in some not exceeding the size of a shilling. In one, where only a finger could be admitted, dilatation was easily effected, and the patient recovered favourably for the first week, when puerperal mania occurred, which continued for some months, and required her removal to an asylum. She, however, ultimately recovered.

The case which terminated fatally, was one to which I was called by another practitioner, in accidentally passing the patient's house whilst she was in labour. The hæmorrhage had occasionally recurred for about three weeks previously. There were symptoms of great exhaustion. The os uteri was much dilated; delay already had been too great. The only chance of saving the patient seemed to be to empty the uterus. Turning was commenced, the feet were easily brought down, and delivery was speedily effected. A dead child was born. The mother for a short time seemed to rally, but in less than half an hour she also was dead. There is too much reason for believing that this sad catastrophe might have been prevented, if delivery had been effected at an earlier period, or if there had been less haste in performing the operation of turning. The practitioner to whom this case belonged has been long since dead.

During the last two years the profession has been greatly agitated by the announcement of Professor Simpson, of Edinburgh, that the practice in placenta prævia, so long taught in the schools, and so generally adopted by practitioners, is erroneous. His doctrines are—1st. That in such cases the hæmorrhage proceeds exclusively from the placenta. 2nd. That it ceases on the expulsion of the placenta. 3rd. That there are many cases on record in which the placenta has been expelled before the birth of the child without fatal consequences to the mother. 4th. That the proper practice to follow, in the generality of cases of this description, is to imitate the plan indicated by nature, *i.e.*, to extract the placenta before the child.

These opinions, announced as they have been *ex cathedra*, with all the weight of professional authority, must have the effect of greatly disturbing, if not destroying, the confidence in a practice which has hitherto been considered as founded on the firm basis of experience, and as presenting under the most fearful circumstances of danger, the only means of rescuing the mother, and perhaps her offspring, from speedy and inevitable death. We can no longer boast with Dr. Blundell, that "the mind is not here, as in some cases, disturbed amongst a variety of practices, each of which may have equal claims for adoption," but we are left in a maze of doubt, uncertainty, and indecision, at a time when decision, firmness, and promptitude, founded on well-understood and established principles of the profession, can alone give security to the patient, or satisfaction to the practitioner.

We are doubtless indebted to Professor Simpson for establishing the important physiological fact, that the hæmorrhage occurring in placenta prævia is derived principally from the placenta, that it is produced by its partial separation from the uterine surface, and for the most part ceases when such separation is complete. Although many instances are on record, in which the placenta has been expelled before the birth of the child, without proving fatal to the mother, and this circumstance may have led individuals to believe the danger in such cases not so great as usually apprehended, yet before Dr. Simpson's announcement, such accidents were generally considered so highly dangerous as to render the escape of the mother almost miraculous. In a few instances these facts may probably be applied beneficially to practice, but that extracting the placenta before the birth of the child, as advocated by Professor Simpson, should generally, or in the majority of cases, supersede the long-established obstetrical rule,—"to deliver by turning, when practicable," is, in my opinion, unsound in principle, highly dangerous in practice, and has already been attended with most fatal consequences. Melancholy cases of death have already been occasionally published in the various Medical Journals, in which there is every reason for believing that if the practice of turning had been adopted, the life of the mother, and probably that of her offspring, might have been saved. How many more such grievous cases have occurred, and are daily occurring, without being published, it is impossible to say, but is a subject well entitled to the grave consideration of the profession.

From the size of the placenta, its attachments to the uterine surface must extend much beyond the partial dilatations of the os uteri, and its extraction must require artificial dilatation to nearly as great an extent as in performing the operation of turning; the danger of manual interference in cases of rigid os uteri must therefore apply equally to both operations. Should the placenta be extracted before the child, the hæmorrhage proceeding from it of course ceases, but the uterus may be so much enfeebled, as not to contract sufficiently to prevent further flow from the uterine surface; and although not appearing outwardly, there may be intense hæmorrhage, as occasionally occurs after natural labour, and the patient may sink undelivered; or if she survive, the child, which is most probably dead, may still require to be turned, although this practice does not meet with the approval of Dr. Simpson.

In a paper published by him in the *Lancet* for the 8th of May last, he observes:—"In adopting the practice, one error which I would strongly protest against has been committed in some instances. Besides completely detaching and extracting the placenta, the child has subsequently been extracted by direct operative interference. If the hæmorrhage ceases, as it usually does, upon the placenta being completely separated, the expulsion of the child should be left to nature, unless it present preternaturally, or the labour afterwards show any kind of complication, which of itself would require operative interference."

From statistical calculations, Dr. Simpson states the average amount of deaths of cases treated by turning, as one in three. Dr. Lee has published a table, shewing the treatment and results of fifty-nine cases of placental presentations, out of which there are nine deaths, where turning had been performed, making the average amount of deaths about one in six

and a half. Dr. Simpson, in making a comparative estimate of deaths in the two operations, gives one death in fourteen cases, in which the placenta has preceded the birth of the child. But in this calculation he includes all the cases he could find recorded, in which the placenta has been expelled by the natural pains without proving fatal to the mother. As such cases can only prove the extraordinary constitutional vigour of the patient, which enabled her to resist the exhausting influence of the hæmorrhage, which in the generality of persons proves fatal, they are not just data for the formation of statistical calculations.

Statistical records of death are often formed without sufficient reference to the details of practice in each case. Before we can place great reliance on them, we should ascertain how many deaths recorded as having occurred from placenta prævia, treated by turning, were owing to *avoidable causes*, and how many were purely the result of the operation. Calculations formed with these precautions would, I have little doubt, prove the practice of turning in these highly dangerous cases to be entitled to the entire confidence of the profession as an established general rule, the *exceptions to which are exceedingly rare.*

CASE OF POISONING BY OXALIC ACID: RECOVERY.

By Charles Barham, M.D., Truro, Physician to the Royal Cornwall Infirmary.

(Read at the Annual Meeting of the South Western Branch of the Provincial Medical and Surgical Association, held at Truro, July 16, 1847.)

Mary Sampson, aged 37, married, had been complaining of violent headache and debility for some weeks, which were treated with tonics and leeching, with some relief. On July 29th she purchased of a druggist about an ounce of oxalic acid, for the purpose of destroying herself, the whole of which she dissolved and swallowed. In about ten minutes she vomited copiously a fluid of a dark bloody colour; the bowels were also purged; the fæces of a natural colour. She lay in bed exhausted, and in a state of insensibility, for four hours. On our visit we found her with senses returned, and able to converse. She told us she had taken oxalic acid, the quantity she had purchased, and the manner of mixing it. She lay supine; face extremely pallid; extremities cold; and the body covered with a cold clammy perspiration; the fingers semiflexed, rigid, and the thumbs bent into the palm of the hand; the pupils natural; the pulse scarcely perceptible at the wrist; heart's impulse much diminished, but both the sounds perfectly distinct. Respiration very slow; tongue brown and dry; converses when roused, but immediately lapses into a sleepy state. Complains of no pain. Ordered chalk mixture freely, with stimulants. On searching, we found no traces of the poison, nor of the vomited matter, the latter having been thrown away, and the vessel washed.

30th, 9 a.m. Remains in much the same state with respect to extremities, pulse at wrist, and heart's action; respiration very quick; face and lips blue complains only of headache; the contraction of the fingers almost gone off; bowels open early this morning, stools of the natural colour; tongue brown; no vomiting.

11 p.m. Complains of much tenderness over the abdomen, and has been somewhat delirious in the former part of the evening, but is sensible now; bowels not open; other symptoms remain as they were this morning. She has vomited once a small quantity of fluid, with a deposit, which the analysis of an experienced chemist proves to be carbonate and oxalate of lime. Ordered to continue the chalk mixture, stimulants, and poultice to belly.

31st, 9 a.m. Extremities warmer; still covered with a clammy moisture; pulse more perceptible at the wrist, and impulse of heart stronger, but its action exceedingly quick; contraction of fingers gone; face less pallid; bowels open three times in the night; stools of the natural colour; still very drowsy, but perfectly sensible; complains of headache, and pain on pressure over the abdomen.

11, p.m. Has been delirious since 6 p.m., with paroxysms of violent struggling; extremities warm; face flushed; pulse much fuller, 120. She is now perfectly rational; complains still of headache, and pain on pressure over the bowels, which have been relieved twice this morning, stools of natural colour. Omit stimulants; chalk mixture less frequently; poultice to belly.

August 1st. She has passed a comfortable night, with intervals of sleep, without any return of delirium; the face is flushed; she complains of headache, pain on pressure over the abdomen, and intolerable thirst. Bowels moved twice; stools mixed with blood. She has vomited some fluid of a yellowish colour; has some slight cough, with soreness of chest; respiration quicker than natural; pulse soft, 110; tongue dry and brown. To have gruel and other nourishment, and a mustard cataplasm over the abdomen.

August 2nd. She is much better to-day; all tenderness of abdomen gone, as well as the vomiting, and there has been no return of delirium; sleeps comfortably; still complains of headache, and excessive thirst; pulse 84, good; bowels open twice, stools of natural colour; she is extremely weak and emaciated; tongue cleaner. To have mutton soup frequently, and to take ammonia and tonics.

9th. Since the last report she has been gradually recovering; she is now able to get down stairs and walk about a little; is extremely weak. Two days since an eruption appeared over the body similar to the maculæ of typhus, which has now completely disappeared. She complains still of intense headache, and has a very desponding look.

This poisoning occurred about seven years ago: no ill consequences have remained. I am indebted to Mr. Slyman Michell, the surgeon with whom I attended this case, for the above narrative.

CASES FROM PRIVATE PRACTICE.

By John Richard Wardell, M.D., Edin.;

Late President of the Royal Physical and Hunterian Medical Societies, Assistant Pathologist in the Royal Infirmary, Edinburgh, &c. &c.

The following cases are not published as presenting features of very great rarity, but rather as being considered of a practical description, and with the nature and treatment of which the practitioner cannot become too familiar. Very uncommon examples of disease are not those from which the most useful benefit is derived; but cases that are at times occurring, and the pathology and cure of which are, perhaps, not so well understood as many other affections, are particularly eligible for being placed in a permanent form. There is no kind of medical instruction which is really so profitable as clinical teaching, which at once renders us acquainted with the often indescribable characters and multifarious features of disease, as witnessed in nature itself; and so it is that accurately detailed cases are, perhaps, really as instructive as any kind of literature in our Journals, and it is much to be regretted that the country, as well as the metropolitan, and the private, as well as the hospital, practitioner, do not more commonly, in an accurate manner, study and faithfully record such cases of interest as from time to time fall beneath their notice. Every contribution, however small, to the commonwealth of medical literature, cannot fail to be of some service; and if the system of deducing and compiling facts were more generally pursued, there would be an aggregation of data highly valuable, and from which many useful and practical conclusions might be drawn.

The first example of disease now offered is that of an affection which is but occasionally met with in adults, and far more commonly occurs in children at an early age, nor was it until of late years fully understood, viz.:—

Spasma Glottidis.

case i.

Esther Cooper, aged 18, servant in a private family; of sanguino-phlegmatic temperament; volume of flesh normal; catamenia recently irregular; has somewhat of a chlorotic appearance; health lately has been pretty good.

April 8th, 1846. About six o'clock this evening, laborious and great difficulty of breathing was suddenly experienced, and each inspiration was performed with a croupy, suffocating sound, so loud that it could with distinctness be heard at remote parts of the house.

7 p.m. Questions can only be answered in an indistinct whisper; never had any similar affection; is reported to have had damp feet during a greater portion of the day, but complained of no indisposition whatever until the setting in of the fore-mentioned symptoms. On fully expanding the thorax, some degree of tightness is experienced over the superior and middle thirds of the sternum; pulse 76, of good strength; countenance manifests an expression of anxiety, and obstructed circulation; croupy sound becoming louder, and a spasmodic paroxysm has supervened. On placing the stethoscope to the lateral aspect of the larynx, a loud whistling sound, resembling the forcible passage of air through a contracted aperture, is most distinctly audible; no anormal sound heard at the thorax, with the exception of increased respiratory murmur, and a greater loudness at the bifurcation of the bronchi.

Venesectio ad deliquium animi. Ordered hot drinks, and to be put to bed.

11 p.m. Croupy sound still distinctly heard immediately on entering the room; countenance more natural, and is on the whole improved; no paroxysm since last visit. Hot bottles to be applied to the feet, and a draught given immediately, with thirty drops of the solution of morphia.

9th, 10 a.m. Reported to have passed a tolerable night, being free from any particular difficulty of breathing, though a good deal disturbed by dreams, during which she was loquacious and wandering; tongue clean and moist; pulse 80, of fair strength; bowels not opened; skin moist; the croupy respiration still audible, but does not produce much apparent inconvenience.

R. Pulv. Opii, gr. iss; Camph., gr. ij. Fiant pilulæ ij., statim sumendæ. R. Decoct. Aloes Co., oz. ij.; Æth. Sulph., dr, ij.; Aquæ, oz. ij. Sit mist. cujus unciam post horas tres capiat et repet. omni secunda hora donec alvus soluta fuerit.

11 a.m. Summoned in great haste, difficulty of breathing having very suddenly increased, and she now labours under very painful feelings of suffocation; tosses about in bed, sometimes quickly rising into the semi-erect position, and in a very distressing manner gasps for breath; countenance presents an asphyxial condition; eyes partly closed, or rather, lids droop in passiveness partially over the eye, and an obvious delineation of suffering is depicted in the countenance; pills were taken, and retained; pulse 90, of good strength; croupy respiration more audible than ever; arms firmly placed on either side, thus giving a fixity to the muscles of respiration. The finger has been quickly introduced into the throat, and rotated in the fauces, which produced an immediate effort to vomit, after which action, a long and deep inspiration has been obtained, that momentarily produced relief. This expedient has been repeated with like effect two or three times, and afterwards the neck and throat, rubbed with Liq. Ammon. Fort. et Tinct. Opii, which rapidly produced redness. A mustard cataplasm has also been applied, and the urgent symptoms have thus been much alleviated. As soon as she could safely perform deglutition, the following draught was taken:—

R. Æth. Sulph. Rect., Sp. Ammon. Co., utrq., gtt. xxx.; Mist. Camph., oz. j. Sit haustus statim sumendus.

Hot bottles applied to the feet, more coverlets thrown on the bed, and a little hot brandy and water given every ten minutes. From this time she kept pretty easy, nor had she any return of the paroxysmal dyspnœa until—

3 p.m. Another fit of difficulty of breathing has come on in as abrupt a manner as before, and the croupy noise is almost as great as it was at 11 o'clock; is tossing about in bed, and seems partially insensible to her present position, violently seizing hold of those who are near her, as if in the extremity of suffering; countenance as before, presents the appearance of

obstructed circulation; slight suffusion of tears; when interrogated, answers in a hurried scarcely-intelligible manner, that she is "choking;" pulse 94, of tolerable strength; skin not at all hot, and is moist, especially at the flexures of the limbs; has taken no solids to-day, with the exception of a finger-biscuit. After my arrival she soon became improved, the inspirations being performed more naturally after the lapse of a few minutes. In this fit there seemed to be indefinably blended, the symptoms of hysteria and epilepsy.

R. Tinct. Valer. Ammon., Sp. Ammon. Co., utrq., gtt. xxx.; Sp. Lavand. Co., Sp. Armoraciæ. utrq., dr. j.; Mist. Camph., oz. j. Sit haustus statim capiendus. Empl. Lyttæ gutturi applicandum.

6 p.m. Breathing performed with greater difficulty during the last half hour, but up to that time she was easier, and had no return of the paroxysms; now complains of sickness and languor. Ordered hot brandy and water, after taking which she expressed herself improved.

9 p.m. Is in a tranquil sleep, and has had no return of dyspnœa since last visit; breathing a good deal louder than normal, but croupy sound not so audible; bowels moved, but not very efficiently.

10th, *mane*. Slept well; tongue clean, though with some tendency to dryness in the centre; blister risen well; skin pretty moist; croupy respiration is heard, though in a moderate degree, and reported to have been less distinct during last night; pulse 68, of tolerable strength; had a fit of difficulty of breathing at half-past nine this morning, which resembled previous attacks, but milder; bowels not moved since last night.

R. Tinct. Valer. Ammon., Sp. Ammon. Co., utrq., gtt. xxx.; Decoct. Aloes Co., oz. ss.; Pulv. Jalap., dr. ss.; Aquæ, oz. j. Sit haustus quamprimum capiendus.

5, p.m. Has gone on favourably since last visit with the exception of having had a paroxysm about two hours ago, but this was not so distressing as former fits; countenance now tranquil, and not expressive of weakness; tongue perfectly clean and moist; pulse 60, of good strength; breathing performed almost naturally, and the thorax fully expands upon inspiration, nor does it give any pain or feeling of tightness; endeavoured to get up this afternoon, but on rising felt faint, and consequently returned to bed.

9, p.m. Favourable in every respect.

11th. Pulse 65; skin moist; tongue clean; slept well and continuously; croupy respiration entirely absent; with the exception of slight headache expreses herself as being much better.

R. Zinci. Sulph., gr. x.; Tinct. Valer. Ammon., dr. iss.; Mist. Camph., oz. vj. Sit Mist.; capt., oz. j. omni sexta hora.

Vespere. No return of unfavourable symptoms.

12th. Improves; voice nearly natural.

13th. Convalescent.

CASE II.

John P——, aged 16, servant, healthy looking, fresh coloured, of clear complexion, rather tall of his age; eyes hazel-coloured; hair light brown; muscular system not very fully developed. States that he has generally enjoyed good health, with the exception of having had three or four epileptic fits, the last of which occurred a month ago, and was of a mild character.

February 9th, 1847. Applied to day on account of having an extreme degree of hoarseness, which might rather be termed aphonia, as he can scarcely speak above a whisper. Yesterday he was exposed to the rain and became very wet, and this morning on awaking, it was with difficulty he could speak. Complains of no pain; bowels open; skin cool; tongue and pulse quite natural.

R. Liq. Ammon. Fort.; Linim. Camph. Co., utrq., oz. ss.; Fiat Linimentum, gutturi appl. ter quaterve die. R. Pulv. Ipecac. Co., gr. viij. Sit pulv. hora somni sumend. Ordered to remain in the house, and at bed-time to put the feet in warm water, and take a basin of gruel after the powder.

20th. Considerably relieved this morning, and pursued his wonted occupations.

3 p.m. Has had a sudden and alarming attack of dyspnœa, and respiration is performed with a crowing sound resembling the hooping of a child; looks flushed and eyes are bright and glistening. Is evidently in great distress and says that he "shall choke." Pulse accelerated and rather hard to the touch. Venesection to eight ounces, which sufficiently affected the pulse. Cataplasma gutturi. R. Æth. Sulph., gtt. xx.; Tinct. Opii, gtt. xxv.; Aquæ, oz. j. Sit haustus statim sumendus.

5 p.m. Breathing easier; bleeding was followed by manifest relief and the blood was extremely venoid when drawn. Still has a sensation of tightness in the throat. Hirudines x., gutturi applicand.

6 p.m. Summoned in great haste, another paroxysm having come on. Eyes riveted in an unnatural fixity of gaze; hands firmly clenched; and inferior extremities are moved in convulsive twitches. Breathing performed with the greatest difficulty, and with the same croupy sound. Pulse 70, of tolerable strength. Intimates that his arms and legs feel benumbed.

R. Æth. Sulph., gtt. xl.; Tinct. Opii, gtt. xxx.; Aquæ, oz. iss. Sit haustus statim deglutendus. Sinapismus ampl. nuchæ.

R. Liq. Ammon. Fort., Lin. Camph., utrq., oz. ss. Fiat Linimentum, gutturi applicand. Ordered the room to be made warm, the extremities to be rubbed, and the inhalation of the vapour of hot water impregnated with laudanum.

9 p.m. During the last two hours has gone on favourably, the breathing being freer, although some degree of spasmodic action has continued at intervals in the voluntary muscles. Another attack of the difficulty of breathing has now supervened, characterized by the same symptoms as before. Places his hand over the region of the heart where there is much pain. On applying the stethoscope to the lateral aspect of the larynx, a loud and somewhat whistling sound is heard, especially during expiration, as if the air was forcibly expelled through a narrow orifice. Action of lungs accelerated, but otherwise normal; skin rather hot, and looks flushed in the face.

R. Tinct. Opii, gtt., xxv.; Æth. Sulph. Rect., gtt., xl.; Vini Gallici, oz. j.; Aquæ, oz. j. Sit haustus statim capiendus. Sinapismus cruri. Sinapismus spinæ a nucha ad sacrum. Sumat Olei Ricini, dr. vj. Rept. inhalatio ut ante.

February 21st. *Mane*. Reported to have passed a good night. No return of dyspnœal paroxysms. Bowels opened three times; tongue moist; pulse 80

Continuing to improve, the mustard plasters were not applied to the spine. Skin rather dry.

R. Liq. Ammon. Acet., oz. j.; Vin. Ipecac., dr. iss.; Mist. Camph., oz. v. Sit mist. cujus sumat cochl. ampl. duo quarta quaque hora.

Vespere. No return of difficult breathing, pulse 80; voice clearer, and is in all respects better.

February 22nd. Continues to improve; bowels not opened since yesterday evening.

R. Pulv. Jalapæ Co., dr. ss.; Syr. Rhœad, dr. ij.; Aquæ, dr. x. Sit haustus statim sumend.

23rd. Improves.

24th. Convalescent.

Remarks.

Spasm of the glottis is much more frequently met with in children than in adults; indeed in the latter it comes but seldom under our notice. Until within the last thirty years it was confounded in the young with croup, and treated upon the general principles acknowledged as necessary in that form of disease. The appearances on dissection shewed that the ordinary characteristics of inflammatory action were not present in the larynx, nor were there the concomitant pyrexial symptoms of inflammation during life; hence it very properly became regarded as of purely nervous origin, and subsequent observation and experience have rendered manifest that it is produced by irritation in the great nervous centres. Various are the names which the complaint has received, when occurring in children,—as bastard croup, asthma of infants,* catarrh suffocante,† laryngismus stridulus,‡ child crowing, § etc., all of which, however, are the various appellations of one disease. When occurring in the very young, the litttle patients will unexpectedly die in the most sudden manner; and from the great fatality by which it is marked, our endeavours for alleviation should never be procrastinated. Those children which are passionate and irritable, and especially such as are of a scrofulous tendency, are most commonly those in whom the disease is observed. It has been known as the prelude to hydrocephalus,‖ and is often caused by dentition; and the cutting of the teeth and lancing of the gums have been found effectual reliefs. On setting in, the child will all at once have considerable difficulty in breathing; the chest is imperfectly expanded; between each inspiration a peculiar noise is made; the eyes look full and starting; the features livid; and often the voluntary muscles, especially those proper to the hands and feet, are spasmodically contracted, so that the whole system seems under a convulsive influence, whilst the muscles common to the functions of respiration will for some moments continue in a rigid fixity; at length, after an interval of several seconds, or, perhaps, a minute, the little sufferer is relieved by a full inspiration, and thus ends the paroxysm.

It differs from croup, because, as observed, it may be, and is generally, present without any accompanying pyrexia or catarrhal complication, and the antiphlogistic treatment would be more likely to augment than cut short its course; but there are cases not only in children, but adults, where the diagnostic marks are of a mixed and indefinite character, rendering it thus less easy to decide as to the kind of remedial measures. Cheyne and Clark are of opinion that the brain is the seat of the disease, but like many other affections incident to the nervous system, it is not satisfactorily proved in what the radical pathology really consists. Any irritative action produced at the different nervous extremities, as during the process of dentition, may thus give rise to a morbid state in the cerebro-spinal axis sufficient for its development, and the same applied to other parts has been known to institute the affection. Irritation in the neighbouring parts, or in such organs as are known to have a peculiar sympathy with the larynx, as the uterine organs in the female, and the generative in man, has been observed to give rise to spasmodic closure of the glottideal fissure. Irritation, it is true, may be considered as an obscure term—a designation devoid of any real or specific meaning; yet, conceding this, it is quite indisputable that it differs essentially from inflammation, as evinced not only by occular demontration, but from other positive and negative proofs; the one is certainly at times preceded by, or associated with, the other, yet are they not identical; and until we become more acquainted with the fundamental conditions giving rise to irritation, we must be content with that term, which in our present ignorance on the point is as expressive as any other word that might be employed. To prove that irritation can produce spasm of the glottis, it has occurred when dissection has shewn tumours pressing upon filaments of the pneumogastric nerve, or the recurrent laryngeals, without any red blood, depositions of lymph, or other traces of inflammation in the air-passages.*

Sometimes in acknowledged instances of croup we are surprised at the sudden manner in which the child is carried off, and on inspection the new membrane, from its not entirely obstructing the ingress and egress of the air, does not satisfactorily account for the fatal termination; and the same might be said of acute laryngitis. In such instances there are good reasons for believing that the inflammation, by its irritative properties, produces spasmodic closure of the fissure, and thus the sudden termination in death may at once be accounted for. During the time that I was assistant pathologist to the Edinburgh Hospitals, one or two instances occurred which are now remembered as illustrative of this statement, particularly the case of a stout and robust man, who had been induced by some of his credulous neighbours to take gin and pepper for a hoarseness, which had supervened on a common cold.

* Millar. † Baumes and Lieutaud. ‡ Good. § Gooch. ‖ Monro, Underwood, and Gölis.

* Dr. Merriman.

On his first admission he came into the institution in the middle of the night, breathing with the greatest difficulty, and each inspiration being performed with a loud whistling noise. The warm bath and other expedients were had recourse to, and in the course of two or three days he was dismissed the establishment. On the night of the day of his departure, the spasm of the throat suddenly returned, and he again sought entrance into the medical wards, which he but a few hours previously had left. The same line of treatment was employed, but not with like success. The breathing continued difficult; there was engorgement of the countenance, and alarming attacks of dyspnœa, rendering the operation of tracheotomy desirable, after which expedient he survived not more than twenty-four hours. On dissection, lymph was found in the trachea, but very little in the larynx; the bronchi were red, and their membranous lining a good deal injected. The inspection unequivocally demonstrated that the inflammatory action in the trachea had given rise to irritation, which produced spasmodic closure of the glottideal fissure. Another instance of a woman I well recollect, on whom tracheotomy was performed, when it was anticipated there would be the results of inflammation in the larynx, which organ I carefully laid open, and minutely examined, but could not discover a particle of lymph. If tumours, pressing upon filaments of the par vagum, or irritation in remoter parts of the nervous system, can give rise to spasm in the larynx, we can much more readily imagine inflammation in the trachea, or in the larynx itself, instituting spasm in this organ; and the pathological illustrations just cited are quite in accordance (certainly not inconsistent,) with rational theoretical inferences. With respect to its occurrence in children, "Wichmann, the Hanoverian physican, and Schmalz," says Dr. Joy, "have taken peculiar pains to point out the distinctions which exist between this disease and croup. The latter seems usually to depend on cold damp air, and sudden atmospheric vicissitudes; its inflammatory nature is manifested as well in the character of its symptoms, as by the beneficial effects of antiphlogistic treatment, and the appearances on dissection. Spasm of the glottis, on the contrary, is excited by passions of the mind, and other sources of momentary irritation existing often in distant parts of the body; catarrhal symptoms form no essential part of the disease; it occurs chiefly in those who have a general disposition to convulsive affections; its attacks are intermittent, and are most susceptible of relief from agents acting on the nervous system; and it presents after death no traces of inflammation of the respiratory organs."* These observations relative to the disease in children have been offered, because in them it has been more thoroughly investigated than in grown-up people; because, as previously remarked, it is by far most frequently met with in the former, and thus there have been more extended opportunities for observation and general deductions.

Spasm of the glottis in the up-grown is most common in females, and especially in hysterical young women. Dr. Joy says, "It occurs chiefly in children, but IN SOME RARE INSTANCES IT HAS BEEN OBSERVED IN ADULTS ALSO, CHIELFY IN NERVOUS WOMEN, AND OLD PERSONS." In nine cases out of ten, when becoming manifest in females, there is great mobility of the nervous system, and some disorder of the uterus or its appendages. It comes on paroxysmally, and presents sometimes accompanying features of the epileptic character. Cold, sudden emotions of the mind, obstructed catamenia, feelings which relate to the sexual functions, and similar excitants, may operate as proximate causes to its development. In such instances, percussion along the spinal processes will occasionally, in the lumbar or dorsal regions, be followed by tenderness, and upon enquiry, the patient will often be found subject to neuralgic pains in the different parts of the body, as under the left mamma or left ribs, at the epigastrium, hypogastrium, etc. She will also void large quantities of limpid urine, whilst the alvine evacuations are scanty and irregular. In males it is perhaps more frequently the result of irritation near to the larynx, than from distant impressions upon the nervous system. When it does occur without any obvious irritating cause in or near the throat, there are great reasons for believing that delicate hysterically-inclined young men, or boys at puberty, would be the most likely to have this curious, and to that sex uncommon, disorder.

When the glottideal fissure becomes spasmodically closed, the patient then of course suffers from all the evils of, or dies from, asphyxia; the countenance becomes turgid and livid, the eyes prominent, and the whole frame convulsively affected. The preternatural vascularity in the encephaloid mass, the great congestion in the lungs, etc., together with the venoid condition of the blood, owing to imperfect aëration, readily impair the sensorial functions, and a state of unconsciousness at once supervenes, indicating the danger then present. The venous engorgement in the brain might be so considerable as to produce rupture of its vessels and consequent sanguineous effusion, after which the case might of course assume the ordinary characters of common apoplexy. The sense of constriction in the chest undoubtedly arises from pulmonary engorgement, as well as from the spasmodic fixity of the muscles proper to the function of respiration.

Dr. Lay, in his volume on "Laryngismus Stridulus," which is but another name for the affection now considered, only particularly confined to infants, makes some interesting remarks on the fundamental causes. He conceives it to be of cerebral origin, as from some

* "Cyclop. of Pract. Med." Part IX., page 350.

diseased or disordered state of the encephalon, or from irritation applied to filaments of the eighth pair, which may be produced by enlarged glands in the neck, pressing upon the recurrent, or some part of the pneumogastric, and thus closing the glottis by "subverting the exact antagonism by which the glottis is automatically and involuntarily kept open, and allowing its margins to come together, and to occasion the peculiar kind of inspiration so much like that of croup." Again, he remarks, in substantiation of the opinion that glandular enlargement is the cause of this affection in children, when, he says, "scarcely an instance has occurred to me since my attention has been directed to the subject in which there has not been the strongest foundation for the belief that either the glandulæ concatenatæ of the neck, or the thoracic absorbent glands, had become morbidly enlarged." Professor Reid, of St. Andrews, has abundantly shewn, that pressure upon any of the chief branches of the par vagum, might close the chink of the glottis, especially upon the laryngeals. Dr. Watson thinks that irritation of the gastric ramifications might even close the fissure, and in corroboration of this opinion he cites from Dr. John Clark, who observes that the attacks in children are "very common after a full meal." It has also been said, that an irritating cause, located in the branches of the trifacial, would have the same effect; this, however, is more problematical than what is advanced with regard to the par vagum. The general doctrines expressed by Dr. Marshall Hall, who philosophically accounts on the principles of reflex action for these previously anomalous and ill-understood functions of the nervous system, are quite applicable, and very elucidatory in unravelling the special pathology of this affection.

From what has been said it seems conclusive, that morbid impressions conveyed to the great nervous centres, or existing in these themselves, will give rise to a spasmodic condition of the glottis in the young. Hence, reasoning from these facts, and knowing that the functions of the cerebro-spinal system are inextricably blended, it may readily be imagined how irritation in one part of the spinal marrow might be transmitted to nerves given off at another, and more especially when it is recollected, that between the organs of generation and the larynx there is an intimate though unintelligible sympathy; therefore, in the instance of the above cases, particularly in that of the female, it is highly probable that the *prima causa* was located in the generative organs; in the boy, perhaps, this conclusion might not be quite so obvious.

(To be continued.)

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, OCTOBER 6, 1847.

It is of great importance to the attainment of the objects for which the erection of County Lunatic Asylums, where such do not already exist, has been determined upon, that the buildings to be constructed should be on the most approved plan. We take it for granted, that the enlightened views which have led to the modern improvements in the general management and treatment of the insane, are those which the Government authorities will be anxious to see carried out; and that while every requisite economy in the expenditure of public money is practised, no miserable attempt at the saving, in the first instance, of some farthing in the pound to the county rates, will be suffered to interfere with their adoption in every particular. Looking also to the influence which many of the members of the Provincial Association must have, both as professional advisers and as personal friends, with the Magistracy of the country, to which body also several of them belong, we deem the present a fitting opportunity to direct attention to the admirable letter on this subject from Dr. John Conolly, which has just been given to the public. The letter is addressed to the Chairman of the Committee of Visitors of the additional Lunatic Asylum for the county of Middlesex, which is about to be erected at Colney Hatch, but its contents are of equal value and importance, and apply with equal force, to every similar body throughout the kingdom, and its recommendations ought to be carefully weighed and considered in every case, in which a similar establishment is contemplated. We therefore deem no apology necessary in bringing these recommendations before our readers, and shall esteem ourselves amply repaid if we can induce those who have both influence and knowledge, to exert themselves in guiding aright persons who may possess the one, but are, to a certain extent at least, wanting in the other.

The first point insisted on is the importance of providing sufficient separate sleeping accommodation. This is a point on which some difference of opinion would seem to exist. The Commissioners in Lunacy consider that "one-third of the sleeping accommodation should be provided for in separate sleeping-rooms or cells, and the remainder in dormitories, each containing not less than three, nor more than twelve, beds." This proportion Dr. Conolly considers insufficient, and indeed incompatible with the full adoption of those principles of treatment which are now

so justly estimated. A deficiency in the number of separate sleeping apartments must inevitably interfere with the due classification of the patients; the safety of some must be compromised; ventilation interfered with; the tranquil will be annoyed and endangered by the violent; the clean greatly annoyed by being placed with the dirty; or, if these latter are to be thus congregated together, the air of the rooms in which they are placed will become most offensive, and cannot but be injurious to the health of all exposed to it. The application of the non-restraint system during the night in such cases must be greatly interfered with, if not altogether incompatible with the safety of the patients, and of course its moral effect on the entire body of patients in a great measure counteracted. Dr. Conolly maintains, that in a well-managed asylum, "every violent and dangerous patient, and every dirty patient, must have a separate sleeping room; that many of the epileptics who are not habitually violent, must be similarly provided for; that many helpless and imbecile patients are unsafe at night except in separate rooms; and that consequently, for all these, who will amount always to at least one half of the whole number of patients in a county asylum, single sleeping-rooms are indispensable." He also states it as his conviction, that for a considerable proportion of newly-admitted patients a separate sleeping-room is essential to the cure; while the comfort to the more sensible and quiet patients, of having an apartment of their own, to which they can retire for reading or working, for tranquillity, and for private devotion, must be at once apparent.

Another most important point as concerns the general safety of the patients is, that the building should be fire-proof. The occurrence of fire in a lunatic asylum, in which the entire building is not sufficiently protected from its spreading, would be a most fearful calamity. The Commissioners recommend that the staircases should be of stone, the store-rooms for inflammable stores thoroughly fire-proof, and other judicious precautions; but Dr. Conolly is of opinion that the entire building should be fire-proof throughout, each story being separated by a stone-floor and roof, so as to make it impossible for any accidental fire to spread.

The advantage of absolutely complying with the recommendation of the Commissioners—that "those portions of an asylum which are intended to be occupied by patients, shall in no case have more than two stories,—that is to say, those on the ground and first floors" is evident; and it is well observed, that when a third story is added, not only is a great additional amount of trouble necessarily entailed on the officers and attendants, but the vigilance and frequency of inspection, so important to the well-being of the patients, and so needful as a check upon the attendants, are greatly interfered with.

There are many other points of much importance to the efficient working of a well-ordered asylum, which it is necessary to keep in view in the original construction of the building. Among these are the providing of due accommodation for the resident medical officers, the matron, and superintendent; of appartments also for a steward, a housekeeper, a dispenser, and other chief officials, required to preside over the respective departments in a large establishment; and of a room for giving the occasional entertainments to the patients, which have been found so advantageous at Hanwell and elsewhere. These, however, we must pass over, but there is another subject which, although not immediately connected with the erection or arrangements of the building, is one on which so intimately depends the value and fitness of the entire institution, that we cannot but allude to the observations which the letter of Dr. Conolly contains on the subject.

The appointment of a qualified superintendent to a county asylum, is certainly the highest duty, in reference to the proper management of the insane, which can devolve upon those with whom it rests; and it is most earnestly to be desired, that in every case in which such appointment may be made, no private or interested motive will be allowed to influence the decision. No favoritism, no family or other connection, should be allowed the least weight. The professional, intellectual, and moral fitness of the candidates for the appointment should alone be taken into consideration; and to an officer of such responsibility, with the requisite qualifications, the salary should be liberal, and everything like the Dutch-auction proceedings, which have disgraced certain other public medical appointments, should meet with most deserved and undisguised reprobation. To a medical superintendent, duly qualified and equitably selected, the utmost authority should be conceded in the management of the patients committed to his care, with full powers to carry out his plans, free from all vexatious interference, whether of Committees of Management, Visitors, or subordinate officers. The utmost care should be bestowed in making the appointment; but once fully assured that the appointment has been a judicious one, the duties of inspection should be directed chiefly to the general economy of the establishment, and to carefully watching, (with full confidence in and with the physician,)

the effects of judicious treatment on the general comfort and welfare of the patients, without any attempt to interfere with its progress, or otherwise regulate the manner in which it is carried out.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

May 1st, 1847.

Dr. MACKAY in the Chair.

SYPHILITIC ULCERATION OF THE LARYNX: TRACHEOTOMY.

Dr. Fletcher exhibited to the Society a specimen of syphilitic ulceration of the larynx, taken from a female, for which the operation of tracheotomy had been performed, which had been sent to him to be brought before the Society, by Mr. Thomas Chavasse, under whose care the patient had been, and with whom Dr. Fletcher had attended in consultation.

Dr. Fletcher first saw the case February 14th, 1847. She was then labouring under difficult and whistling respiration, which had been gradually getting worse for some time. The seat of the obstruction was evidently in the larynx; the lungs did not present physical signs of disease, the respiration was scarcely to be heard in any part, percussion was healthy, and the voice being destroyed by the disease in the larynx, its value as a sign of disease was of course done away with. The history of the disease was such as to render it certain that it was of syphilitic origin. The patient had had four children, and was then pregnant at the seventh month. Dr. Fletcher proposed that mercury and iodine should be actively employed, and the case closely watched, in order that the operation of tracheotomy should be immediately performed if any symptoms of increased difficulty of breathing presented themselves, and requested that Mr. Chavasse, under whose care the patient had been for some years, should meet him in consultation in three or four day's time, to see the effect of the remedies, feeling that should there be no improvement, the case as it already stood, justified the recommendation of the operation of tracheotomy, both as a means of giving the larynx a better chance of undergoing a process of cure, by relieving it from the irritation of the air pasing through it in respiration, and also as preventing impending asphyxia.

On the 28th, Dr. Fletcher met Mr. Chavasse in consultation; the patient was better in every respect, the breathing less difficult. The treatment was continued, and a blister applied to the region of the trachea, which was to be dressed with mercurial ointment. Dr. Fletcher continued seeing the case with Mr. Chavasse, every third or fourth day, until the 9th of March, during which time the improvement was such as to lead to the treatment being persevered in, and to the operation of tracheotomy being deferred, but if any indication of asphyxia should come on, the operation of tracheotomy was to be immediately performed, as the only means likely to prolong the life of the patient. The treatment was continued until the 24th of March, when an attack of asphyxia threatened the life of the patient, and Mr. Chavasse urged the performance of tracheotomy. The friends wished Mr. Hodgson to see the case, who coincided in the opinion already given, and on the 25th of March, the operation was performed by Mr. Chavasse, with great relief to the patient, who went on well for several days; but on the 7th of April, having been for three days previously much worn down, and harrassed by attacks of difficult breathing, obliging her sometimes to wear the tube, and at others to take it out, as the quantity of mucus from time to time accumulated, she was seized in labour. The child appears to have been born almost before labour-pains commenced, and immediately on the birth of the child she expired. Very little blood was lost, and the child and after-birth were expelled almost together.

Mr. Hodgson considered this a case of syphilitic disease; it had been introduced in some unfortunate way into the family, and every member seemed to suffer from it in some way or other. This patient had suffered from the disease for some years, and he thought her case illustrated a fact which had not been noticed by authors, that syphilitic disease affects the cartilages of the larynx in a similar manner to that in which it affects the bones,—namely, the cartilage or its perichondrium becomes the seat of the disease in the same way as a node is produced by it upon the bone, and that disease does not always commence by ulceration of the mucous lining of the cartilage, as generally supposed. In this case, a portion of the thyroid cartilage was necrosed, which he believed was the cause of the very fœtid breath. He would take the liberty of relating another case, which illustrated the same fact. A gentleman, who had lived much abroad, had disease in the bones of the head, and his larynx was affected with the same disease; the symptoms were so urgent that tracheotomy was performed, and he breathed through the tube for fifteen months. Several attempts were made to do without the tube, but without success. The day before Mr. Hodgson saw him, in a violent fit of coughing, a bony substance was expelled. At length he died exhausted. The expelled substance was found to be a portion of the thyroid cartilage, which had fallen into the right bronchus. The larynx was nearly, if not entirely, grown up. Within the last fortnight, Mr. Hodgson saw a poor man in the General Hospital who had suffered from syphilitic disease of the larynx; he was thought not to be in a state sufficiently dangerous to require the operation. On the next day he died suddenly from asphyxia. In the larynx was found considerable ulceration, which also extended in patches down the trachea. In another case which seemed to be caused by the bite of a dog, which was succeeded by ulceration of the larynx, the attacks of asphyxia were very urgent. The operation of tracheotomy was performed, under which the patient died. No examination of the body took place. The performance of the operation of tracheotomy in cases of ulceration of the trachea, Mr. Hodgson said, required the deepest consideration. On the one hand he thought it ought to be done earlier than it was usually resorted to; and yet, on the other, the operation itself was one attended

with many dangers, both as to its performance, and as to the means used to keep the aperture, formed in the trachea, open by wearing tubes. In a woman upon whom the operation was performed in the General Hospital, death took place a week after, from abscess of the brain; but the operation was generally too late if delayed until asphyxia came on. In the case now before the Society, Mr. Hodgson thought death took place from the inflammation caused in the trachea by wearing the tube, in consequence of which the removal of the tube was required. Mr. Hodgson objected to the longitudinal incision, if the opening is required to be kept open some time after the operation; in such cases a transverse incision is much more desirable, as the former heals up so quickly that there is always difficulty in keeping it open, whilst in the latter the difficulty of healing it is so great that most commonly a fistulous opening remains after the greatest care having been taken to heal the wound, which is very well exemplified in cases of cut-throat. Mr. Hodgson knows a patient who cut his throat transversely some years since, and the wound is not healed yet. It would be still more effectual to take out a portion of the trachea.

Mr. Ryland said that Mr. Hodgson's view of syphilitic disease, was to him quite new, but he thought that in all the cases of syphilitic disease of the larynx he had seen, they had commenced by ulceration.

SCIRRHOUS PANCREAS.

Dr. Fletcher exhibited a pancreas affected with scirrhus, especially at its head, by which the ductus communis was completely obstructed, so that no bile could flow into the duodenum.

The patient, a male, about 45 years of age, applied to Dr. Fletcher on the 8th of last month, having suffered from jaundice above a year and a half; he was then very yellow. The region of the liver was somewhat enlarged; there was pain situated about midway between the ensiform cartilage and umbilicus. It appeared a case of jaundice from obstruction to the course of the bile. There was no sign of aneurism nor of any tumour, and none of the symptoms of disease of the pancreas were related by the patient, except the passing of white wax-like matter from the intestines, which had occurred several times during the progress of the case. The patient died on the 15th, rather suddenly, the day he was to have called upon Dr. Fletcher again, having tried very little of the remedies, which consisted of counter-irritation and alteratives. On the 16th, early in the morning, a *post-mortem* examination fully explained the cause of the jaundice from the scirrhus of the pancreas; the bile duct was completely obliterated, and above this the ductus communis was dilated so as to be large enough to allow four fingers to be passed into it. The gall-bladder was capable of holding two-thirds of a pint, and the ductus hepaticus and its branches were all dilated so much, that a finger could be passed into any of the branches, in any part of the liver, and these were all distended with colourless bile. The liver was about half again as large as natural. All other organs in the body appeared healthy on examination. The brain was not examined.

Foreign Department.

NOTES ON SCURVY, AS IT APPEARED IN THE SALPETRIERE IN 1847, AND ON THE COMPOSITION OF THE BLOOD IN THE DISEASE.

By Dr. A. Fauvel

(Translated for the Provincial Medical and Surgical Journal.)

[Some difference of opinion still existing as to the chemical constitution of the blood in scurvy, and its importance as explanatory of the symptomatology of the disease, we have thought that the following researches upon the subject recently made at the Salpêtriére on more than 30 cases, might be interesting to the readers of the *Provincial Medical and Surgical Journal*, in connection with the papers upon the same disease, which have already appeared.]

The disease declared itself chiefly in females of an advanced age, the youngest of our patients being at least sixty-nine years of age, while three were upwards of eighty. There is not much to be said respecting the etiology of the disease, we are only able to state that the majority inhabited upper rooms, and that their food consisted chiefly of meat with bread, meat soups, and wine. All were apparently in good health previous to the attack.

The disease declared itself with vague pains in the extremities, with a sense of general malaise, disagreeable taste in the mouth, and loss of appetite. In some, spots on the skin commenced simultaneously with the above symptoms. The chief symptoms when the patients were first seen, were a particular discolouration of the skin, hæmorrhagic spots and patches, a special alteration in the state of the gums, and general prostration of the vital powers.

The discolouration of the skin consisted in a yellowish tint, *sui generis*, most marked on the face; it neither resembled exactly the icteric, chlorotic, nor cancerous hue, but was most like the colour left by the decline of an ecchymosis. This colour affected even the conjunctiva and gave an appearance to the patient which could not admit of misapprehension as to the nature of the disease, The *hæmorrhagic spots* varied in appearance, and consisted either of small points of a vivid red, scattered principally on the anterior aspect of the limbs, or of true petechiæ, the situation of which was the same. The most important and characteristic spots consisted of large ecchymoses or sanguineous infiltrations, situated in a subcutaneous cellular tissue. When the hæmorrhage was of an ancient date, its circumference was of a yellowish colour, indicative of the commencement of absorption.

The pains of which the patients complained were of two kinds, the one spontaneous and deep-seated, the other more superficial and excited by pressure.

The *alteration in the gums* was quite characteristic; it did not consist of a general tumefaction and softening of their tissues, as is seen in certain forms of stomatitis, but of fungous vegetations, developed exclusively around the neck of each tooth, so that the alveolar

disease was proportionate to the number of teeth. In one patient who had but a single tooth, there was but one patch of vegetation, and this disappeared on the removal of the tooth, long before the subsidence of the other scorbutic symptoms.

Mastication was difficult or impossible, and the mouth exhaled a fœtid odour. Among the other general symptoms, prostration of strength was marked; and there was anorexia from the first. Constipation occurred in most of the patients. Blood was never seen in the evacuations; neither was there any other hæmorrhage of consequence, with the exception of epistaxis in one case.

The treatment consisted in the use of a drink acidulated with lemon juice, a gargle of alum, and a generous diet, of which green leguminous plants formed a considerable portion.

[The analysis of the blood of five of M. Fauvel's patients was undertaken by MM. Becquerel and Rodier, whose researches give the following results] :—

Case I.—Female, aged 76. Severe case: first bleeding,—the clot much buffed; second bleeding, fifteen days later,—clot dense, resisting, dark-red, and spotted with white striæ.

Density when defibrinized - 1050.6
Density of serum - - - 1025.5

Analysis of 1000 parts of Blood.		Analysis of 1000 parts of Serum.	
Globules - - -	109.	Organic matters -	77.7
Fibrin - - - -	4.1	Inorganic matters -	7.8
Organic matters of serum - - -	69.2	Water - - - -	914.5
			1000.
Inorganic matters of serum- - -	6.8		
Water - - - -	810.9		
	1000.		

Case II.—Female, aged 74. Severe case; blood firmly coagulated. Density of defibrinized blood 1048.6.

Analysis of 1000 parts of Blood.		Analysis of 1000 parts of Serum.	
Globules - - -	110.8	Organic matters -	73.8
Fibrin - - - -	3.6	Inorganic matters	7.
Organic matters of serum - - -	65.7	Water - - - -	919.2
			1000.
Inorganic matters of serum - -	6.2		
Water - - - -	813.7		
	1000.		

Case III.—Female, aged 73. Slight case; clot dark and loose. Density of defibrinized blood 1051.7.

Analysis of 1000 parts of Blood.		Analysis of 10300 parts of Serum.	
Globules - - -	116.5	Organic matters -	76.2
Fibrin - - - -	3.	Inorganic matters	6.2
Organic matters of serum - - -	67.3	Water - - - -	916.6
			1000.
Inorganic matters of serum - -	5.5		
Water - - - -	807.7		
	1000.		

Case IV.—Female, 69; mild. Defibrinized blood, 1047.2.

Globules - - -	116.	Organic matters -	71.3
Fibrin - - - -	2.6	Inorganic matters	8.2
Organic matters of serum - - -	63.1	Water - - - -	920.5
			1000.
Inorganic matters of serum - -	7.3		
Water - - - -	811.		
	1000.		

Case V.—Female, 72 years. Severe case; epistaxis. Defibrinized blood, 1038.3.

Globules - - -	79.4	Organic matters -	61.5
Fibrin - - - -	2.2	Inorganic matters	8.5
Organic matters of serum - - -	56.2	Water - - - -	930.
			1000.
Inorganic matters of serum - -	7.8		
Water - - - -	854.4		
	1000.		

From the study of the blood in these cases it appears :—

1. That far from presenting that state of dissolution which has generally been admitted, the blood in scurvy coagulates firmly, and the serum is uncoloured by globules.

2. That the density of the defibrinized blood was in all the cases below the normal standard, (1057.)

3. That the density of the serum is notably diminished, (1027.)

4. That the globules were in all cases below the mean, (127.)

5. That the fibrin was in no case diminished, but in some sensibly increased.

5. That the organic matters of the serum, as albumen, were below par.

6. That in no case was there an augmentation of the saline matters, nor alkali in excess.

[The above memoir concludes with some observations on the complete subversion which the predominent theories of scurvy have received by these researches. It was thought the fibrin was diminished, and hence the profuse hæmorrhages, &c. It is proved by these analyses, as was previously ascertained by Mr. Busk, that it is, on the contrary, in excess. The theory of the alkalinity of the blood is equally opposed by the above facts, as is also another favourite theory of M. Andral, that when the albumen is diminished to a certain point dropsy is the necessary consequence, for it was found that though the number of albumen was low, anarsarca only appeared in one case, and that to a very trifling amount.]

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES.

AUTOPLASTY IN VESCICO-VAGINAL FISTULA.

Several communications have been made to this Academy, since our last Report, but a few only are of general interest. Of these, one by M. Jobert,

(de Lamballe,) entitled, "Anatomical and Therapeutical considerations respecting the Cure of Vesico-Vaginal Fistula by Autoplasty," is of importance. In this work the author first investigates the causes of these fistulæ, and points out the most usual situation, their form, and the mechanism of their production. He particularly insists upon the necessity of distinguishing traumatic fistulæ, produced by the direct violence of instruments, and those which are consecutive to gangrene, induced by the pressure of the infant's head. He also passes in review the different complications attendant upon vesico-vaginal fistluæ, such as erythema, pustules, ulceration of the neck of the uterus, vesical calculus, &c. Speaking next of their treatment, he details his own proceeding, ("Autoplastie par glissement,") which consists in attaching a portion of the mucous membrane of the vagina to the edge of the fistula, previously pared, and alludes to several instances of its entire success.

SUB-PERIOSTEAL EXCISION OF BONES.

M. Larghi presented a memoir on *sub-periosteal excision of bones*, in which he shows that the removal of both bone and periosteum, as is usually practised, is a faulty proceeding, and that if the periosteum covering the excised portion of bone be left, the bone itself will be reproduced. In proof of this he related cases of excision of the ribs, in which the continuity of the bone had been perfectly restored.

ÆTHER VAPOUR.

3. Some further information on the subject of æther was also communicated. M. Pirogoff advised the injection of the vapour into the rectum, instead of inhalation, and maintained that its effects were equally manifest and unattended by any of the ill effects, occasionally produced by it on the respiratory passages.

M. Parchappes also presented a memoir on the "poisonous effects of æther-inhalation," and M. Basseron one on its medicinal use in "cerebro-spinal meningitis." It does not appear, however, to have been followed by any marked benefit.

MAGNESIA IN ARSENICAL POISONING.

4. M. Dumas presented a report on several communications by M. Bussy, relative to the employment of magnesia, as an antidote in arsenical poisoning, This report gave rise to an animated discussion, which chiefly turned on the question of priority. The result of the discussion clearly proved that magnesia had been long used as an antidote to arsenious acid, and that M. Bussy was not entitled to any credit as a discoverer.

Dr. Marshall Hall presented a memoir on the comparison of the tetanic effects produced by electricity and by strychnine.

M. Flourens detailed his experiments on the injection of various substances into the arteries,—such as æther, alcohol, turpentine, &c. These are without interest.

EMPLOYMENT OF ÆTHER VAPOUR.

M. Roux brought forward two cases of lithotomy first performed under the influence of æther. The first patient, a young man, 22 years of age, recovered; the other, a man of 82, although the operation was successful, sank from exhaustion fifteen days after.

In reference to the administration of æther per rectum, a second communication was made by M. Pirogoff, in which several successful operations are detailed.

M. Ville has announced the unexpected fact, that during the insensibility from æther, more carbon is exhaled from the lungs than during the waking state.

[This discovery is quite at variance with previously ascertained relations of expired carbon, to the circumstances under which the body is placed. Hoffman has clearly shewn that it is in direct ratio to the amount of muscular activity; and Andral and Gavarret have ascertained that the quantity increases with the increase of the muscular system, and is larger in men than women.—See Dr. Day's Report on Chemistry, "Half-Yearly Abstract," vol. 1, p. 295.]

M. Lemaitre has exhibited æther vapour in two cases of epilepsy; in one an attack supervened after each inhalation, but it was much modified in character. In the other case, the attacks were suspended entirely as long as the patient was under observation.

NEW MODE OF DRESSING WOUNDS.

M. Baudens described a new mode of causing adhesion of wounded surfaces, which he is in the daily habit of employing. It consists in placing a bandage circularly above the wound, if an amputation, with a strong pin placed in it, so that its point and head projects from the bandage; a skein of cotton is then wound from one to the other over the flaps, which are thus kept in apposition by a network of threads. The advantage of the plan is stated to be its coolness, and the freedom with which the discharges are allowed to drain away.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE.

PROPHYLAXIS OF SYPHILIS.

M. Gibert read a memoir on this subject, in which he proposed that a lotion of the bichloride of mercury should be used after a suspicious connection, basing his belief in its protective power on the known effects of mercury over the disease, and the possibility of destroying the virus by local means. There was little or no discussion upon this paper, many of the members being of opinion that it was contrary to the dictates of morality to take any steps to render the results of criminal intercourse of the sexes innocuous.

GLANDERS.

As immediately connected with the above subjects, M. Renault introduced some interesting observations reepecting the transmission and incubation of animal poisons in general, illustrating his views by the more particular consideration of the poison of glanders. M. Renault has endeavoured to determine the length of time after which the poison may be arrested. He inoculated several animals and then sought to solve the question by cauterizing or removing the part at different intervals of time. As the result of his experiment, it appears, that neither cauterization nor excision

has any power to suspend the operation of the poison once that its effects have been manifested. A similar remark has been made by M. Bousquet, with respect to the vaccine virus; that gentleman has found that the destruction of the vaccine vesicle immediately after its commencement does not do away with the immunity afforded by it, and therefore that the maturation of the vesicle is not necessary for the protection of the individual. We should regard this assertion as wanting coroboration.

ALBUMINURIA FROM CANTHARIDES.

M. Bouillaud called attention to the circumstance that albumen may appear in the urine as the result of the irritation of cantharides, as in the application of blisters. This communication gave rise to a brief discussion, in which MM. Rayer, Martin Solon, and Moreau took part. M. Martin Solon pointed out the difference between the urine thus affected and that of Bright's disease. In the first, the albumen is only suspended in the urine, in the second it is combined with it. M. Moreau alluded to the presence of albumen in puerperal convulsions, a fact pointed out by Dr. Lever long before it was known in France.

Letters upon the same subject were subsequently communicated by M. Moret Lavallée and M. Vernois. The former has described the affection under the term "Cystite Cantharidien," and admits three stages,—one in which the albumen is in solution; the second in which it coagulates spontaneously, and subsides to the bottom of the bladder; the third in which it appears as false membranes of various consistence.

M. Vernois, who has continued the researches of the former writer, has examined the urine after and before the application of blisters, in cases in which albuminuria is not unusually present. He found that in twenty-six males, whose urine was free from albumen previous to the application of the blister, it became albuminous subsequently in sixteen; in twenty-six females, it was discovered in only three. These remarks are not without their value, as regards the pathological importance of albuminous urine.

LITHOTRITY.

At a subsequent sitting, a discussion, not yet finished, was commenced on the comparative merits of lithotomy lithotrity, and the applicability of æther in those operations. There were no new arguments adduced by either party which bear repetition, we therefore only give the results of M. Civiale's experience, as detailed by himself. From 1824 to 1830, he states that he visited 506 cases of stone, 307 of which were lithotritized, and 199 were unfit for the operation. Of the former number there were—

Between the ages of	7 and 20	—	9
	20 „	40 —	55
	40 „	50 —	105
	60 „	80 —	138

206 were cured, 3 only relieved, 7 died.

He also related other cases seen subsequent to the above date, making in all 591 cases in which he had operated. Of these he asserts that 566 were cured, 14 were fatal, and 11 were incomplete cures.

SPARKLING SYNCHISIS.

This is the name given by M. Desmarres to a phenomenon exhibited by the eyes of two patients who had been operated upon for cataract, and which consists in the appearance of sparkling points deeply seated in the eye. He does not consider that this appearance is due to the presence of foreign bodies, but that it is caused by a softening of the vitreous body, and an ulceration in the hyaloid membrane, portions of which being bent upon itself, reflect instead of refracting light.

M. Tavignot considers the brilliant points to be caused by the presence of corpuscles of cholesterine, such as are seen in the fluid of hydrocele, &c., and M. Malgaigne is of the same opinion.

HEREDITARY NATURE OF MADNESS.

M. Prus reported on a memoir of M. Baillarger, which contains the following conclusion:—1. Madness in the mother is most to be feared, and is transmitted to the greatest number of children. 2. The madness on the mother's side is more likely to be transmitted to the girls than the boys.

ANECDOTES OF THE MEDICAL PROFESSION.

(*Continued from page* 418.)

No. X.—After stating that he had instructed some convalescents to wait upon those more seriously affected with the plague, many of whom again suffered from it, contrary to the opinion of some celebrated writers, who had asserted that no one would suffer from it a second time in one season, Desgenettes says,—It was to encourage the minds and shaken courage of the army, that in the middle of the hospital, I dipped a lancet in the pus of a bubo, existing in a convalescent who had suffered in the first degree, and that I made a slight puncture in the groin and the arm-pit, without taking any other precautions, than of washing myself with water and soap, which were brought to me. I had for more than three weeks two small points of inflammation, corresponding to the two punctures, which were yet very tender, when, on my return from Acre, I bathed in sight of one division of the army, in the bath of Casarea.

I believe that I incurred more danger, with a less useful end, when being invited by the quarter-master of the 75th demi-brigade, an hour before his death, to drink from his glass a part of his potion, I did not hesitate to give him that encouragement. This circumstance, which occurred before a great number of witnesses, operated remarkably in removing the dread of the Paymaster of the cavalry, Durand, who fouud himself in the tent of an infected person.

Berthollet told me one day that he was led to believe that the contagion was often communicated by the organs of deglutition by means of the saliva; whether it was that the opinion of the great chemist was too greatly present to my mind, or indeed, that it is in human nature not to have at all times the same amount of resolution, I took afterwards in the desert with extreme repugnance, followed by distressing reflections, some water offered to me in recognition by the same soldier, perfectly cured,

who had furnished me with the pus for my experiment.—*Histoire Médicale de l'Armée d'Orient par Desgenettes*, p. 87.

No. XI.—General Buonaparte had me summoned to his tent, where he was alone with his chief staff officer. After a short preamble upon our sanitary condition, he said, "In your place I would terminate at once the sufferings of our plague patients, and put an end to the dangers with which we are threatened, by giving them opium." I answered simply, "My duty is to save." The General then calmly unfolded his idea, saying that he only recommended for others, what, under similar circumstances, he should require for himself. He begged me to observe also, that he was charged with the safety of the army, and, of course, to prevent our abandoned invalids from falling alive by the Turkish scimitar. "I do not seek" continued he, "to overcome your repugnance, but I think I shall find those who will appreciate better my meaning."

General Berthier remained silent during this conversation, but he told me directly after, that he approved of my refusal. It was not until our return to Jaffa, and not until which, I can attest, that they gave to some of the sick, to the number of twenty-five or thirty, a strong dose of laudanum. Some rejected it by vomiting and were relieved, recovered, and related all which had passed.—*Op. Cit.*, p. 245.

No. XII.—At length he (Dr. Jackson,) became a prisoner to the American commander, General Morgan, under circumstances so highly honourable both to the conqueror and his captive, that they cannot fail to excite admiration. During the heat of the action, fought at Cowpens by a division of the British army, under disadvantages of unfavourable position and numerical inferiority, at a moment when the issue of the battle was no longer doubtful; Mr. Jackson, who happened to be well mounted, perceiving that the horse of the officer commanding the British troops had been shot under him, immediately rode up to the dismounted commander, and tendered to him the horse he was riding himself, remarking, that for his own part he was but an obscure individual, whose escape could have but little beneficial influence, but that his (the officer's) safety was of the highest importance to the army. The commander, Colonel (afterwards General) Tarleton, thus pressed, accepted, though reluctantly, the generous offer, and escaped. This is truly in harmony with the finely-balanced faculties of his mind, evincing traits of Roman heroism, deserving to be held in remembrance in military records. At this moment, Mr. Jackson's presence of mind did not forsake him. Seeing that the wounded British were already in the power of the enemy, and that he must be captured, instead of waiting till the enemy placed hands upon him, he fastened his white handkerchief to his walking-stick, and boldly stalked towards the Americans as a flag of truce. Being asked what he had to say, he answered "I am assistant-surgeon to the 71st Regiment; many of the men are wounded and in your hands; I therefore come to offer my services to attend them." A person coming with a flag under such circumstances appearing a somewhat suspicious matter, he was conducted to the rear as a prisoner. He was, however, in all respects well treated, and occupied himself that night in tending the wounded; and in default of dressings for them, he disrobed himself of his only shirt, and tore it up into bandages. This action was truly characteristic of the man, simple, prompt, and practically benevolent. Through life it was the same; he was always ready to sacrifice himself for the good of others; and whatever he had was freely, and cordially, but quietly and modestly, at the command of suffering and distress.

Next morning he was sent for, and examined by Colonel Washington, to whom he tendered his professional assistance for the American wounded also, which was readily and courteously accepted; nor was the spirit of the offer forgotten by a generous enemy, This truly noble conduct, indeed, attracted general notice, and so greatly pleased the American General, that as soon as the British wounded could be exchanged, our gallant medical officer was sent back with them, no parole being required, nor exchange demanded.

The anecdote relative to General Tarleton, stated above, was not communicated by Dr. Jackson himself, but by an officer serving in Tarleton's brigade at the time as a captain, namely, the late Colonel Hovenden, who was present in the action, and therefore an eye-witness of the fact. When Dr. Jackson, in after life, was referred to in terms of surprise that he had never mentioned the circumstance, (and one especially that did him so much credit for patriotic disinterestedness,) even to his intimate friends, and being pointedly questioned regarding its authenticity, his short, simple, and modest reply was, "It is true."

It would have afforded us, for the honour of human nature, much pleasure to be able to enter upon this brief record, a demonstration of General Tarleton's grateful recollection of the service done to him by Mr. Jackson, in the hour of rout and danger; for painful as may be the task, it is right to mention, that in his history, Lieutenant-Colonel Tarleton is altogether silent on this remarkable instance of duty and devotion, and to which perhaps he owed his life, as he most certainly did his liberty and capability of usefulness. General Tarleton may possibly have carried in his own bosom a sense of the obligation, though a diffidence, neither very intelligable nor laudable, may have sealed his lips and his pen respecting it. The silence of Dr. Jackson and his friends is quite as expressive in another way as Lieutenant-Colonel Tarleton's. It tells of unrequited service, unappreciated generosity, and unrewarded devotion to public principle.

At another time during the American war Jackson displayed equal bravery and contempt of danger. After one of the battles, when the British troops were under the command of Lord Cornwallis, and were retreating, a building into which the sick and wounded had been carried, was riddled by the shot of the enemy, and visiting it, became so dangerous that the surgeons proposed casting lots to determine which of them should go and attend the wounded soldiers. Jackson, whose feelings were ever alive to the sufferings of his fellow-creatures, was present, and when the proposal was made to him, he said, 'No, no, I will go and attend them,'

and he did so.—*Biographical Memoir of Robert Jackson, M.D., in a View of the Formation, Discipline, and Economy of Armies.* Third Edition. 1845. p. 34.

XIII.—During the retreat from Moscow, the passage of the Beresina was the most terrific. The bridges broken down, and the enemy pressing in all directions, caused the most dreadful havoc and confusion; nothing was to be heard but the voice of thousands trodden under foot by their stronger neighbours; nothing to be seen but destruction and despair! On that fatal day Larrey nearly fell a sacrifice to his anxiety to preserve some cases of surgical instruments. The professional respect in which he was held saved his life. No sooner was he recognized, than the French soldiers, regardless of their own safety, passed him along over their heads from one to another till he crossed the only crazy bridge remaining. —*Sir George Ballingall's Introductory Lecture*, 1841.

XIV.—In the attachment of Charles IX., (the bigotted and brutal son of Henry II.,) of France, to his surgeon, Ambrose Paré, we have a singular instance of medical credit, averting that miserable fate at the massacre of St. Bartholemew, which no other claims of public or private merit, nor any connection of friendship, interest, or blood, were able to prevent. Charles shut him up in his own room, saying "It is not right for a man so useful to the world to perish in such a manner."—*Wadd's Nugæ Chirurgicæ*, page 245.

NOTICE OF THE LATE DR. ANDREW COMBE, OF EDINBURGH.

[The following brief notice of a highly intellectual and accomplished physician, and most amiable man, the late Dr. Andrew Combe, will not be unacceptable to the members of the Provincial Association, and we have only to regret that our limits do not allow us to give the memoir from which it is condensed at greater length.]

Dr. Combe was born at Edinburgh, on the 27th of October, 1797. His father, who was remarkable for his worth and unassuming manners, had married in 1775 a daughter of Abram Newton, Esq., of Curriehill. From this union sprang a family of seventeen children, of whom Dr. Combe was the fifteenth child and seventh son. Having gone through the usual course of instruction at the High School, he was bound apprentice to the late Henry Johnston, Esq., surgeon in Edinburgh; and in 1817 took his surgeon's diploma. With the view of farther qualifying himself for medical practice, he next repaired to Paris, where two years were laboriously spent under the tuition of Dupuytren, Esquirol, Spurzheim, &c. In 1823 he began to practise in Edinburgh, and about two years later took there his medical degree. The conscientiousness, kindliness, and sagacity, which he displayed as a physician, and the extensive knowledge he had acquired of his profession, speedily brought him a flourishing practice, which became every year more extensive, till a return of pulmonary symptoms under which he had before suffered obliged him in 1831 to proceed to Italy. He was, however, able to pass the winter 1832-3 in Scotland, and in the latter year to resume his practice. In 1836 he was appointed Physician in Ordinary to the King and Queen of the Belgians, and for several months attended the royal family in Brussels, but the climate proving unfavourable to him, an alarming return of the pulmonary symptoms abruptly sent him back to recruit his health in his native land. Subsequently he continued to act as Consulting Physician to their Majesties, and occasionally paid them a visit. About six or seven years ago he was appointed one of the Physicians Extraordinary to the Queen in Scotland, and afterwards one of her Majesty's Physicians in Ordinary in that part of the United Kingdom. He was also a Fellow of the Royal College of Physicians of Edinburgh, and a Corresponding Member of the Imperial and Royal Society of Physicians of Vienna.

Dr. Combe's death took place at Gorgie Mill, near Edinburgh, on Monday, the 9th of August, when he had nearly attained the age of fifty years. Since 1820 he had laboured under pulmonary consumption, which frequently interrupted his practice, compelled him to spend many winters in France, Italy, or Madeira, and at length, by wholly unfitting him for the active duties of his profession, gave him that leisure which he turned to so excellent account in the preparation of his well-known works on health and education. In April last, hoping to receive benefit from a voyage, he paid a short visit to the United States; and although this hope was disappointed, his health did not appear to have suffered from the exertion, and it was not till within a few days of his death that his condition became alarming. The immediate cause of that fatal event was chronic disease of the bowels, which suddenly came to a crisis. His sufferings were slight, and he displayed to the end that cheerfulness and serenity which was a prominent feature of his character during life.

The works by which Dr. Combe is best known to the public are—"The Principles of Physiology applied to the Preservation of Health, and to the Improvement of Physical and Mental Education," of which twelve editions have been called for since its first appearance in 1834; "The Physiology of Digestion considered with Relation to the Principles of Dietetics," originally published in 1836, and now in the seventh edition; and "A Treatise on the Physiological and Moral Management of Infancy, for the use of Parents, of which the first edition came out in 1840, and the fifth in the present year. He also published in 1831 "Observations on Mental Derangement; being an application of the Principles of Phrenology to the Elucidation of the Causes, Symptoms, Nature, and Treatment of Insanity," a work which has long been out of print; and contributed several essays and papers to the Phrenological Journal, and to the Transactions of the Phrenological Society, of which he was a leading member. All his works are marked by a peculiar earnestness, lucidity, and simplicity, characteristic of their author. To this must be ascribed much of the extraordinary success

they have met with, and on this quality undoubtedly rests no small portion of their acknowledged utility. Those, however, who look below the surface, will not fail to trace a deep philosophical spirit as pervading them, something arising from a perfect apprehension of, and a perfect allegience to, the natural rule of God in our being.

The personal character and private life of Dr. Combe formed a beautiful and harmonious commentary upon his writings. In the bosom of his family and the limited social circle to which his weak health confined him, he was the same benignant and gentle being whom the world finds addressing it in these compositions. The same clear sagacious intelligence, the same entire right-mindedness, shone in his conversation. An answer to any query put to him, whether respecting professional or miscellaneous matters, was precisely like a passage of one of his books, earnest, direct, and conclusive. Whatever, moreover, he called upon others to do or to avoid, that he did, and that he avoided, in his own course of life, for doctrine with him was not something to be treated as external to himself, but as the expression of a system of divine appointment of which he was a part. To his rigid though unostentatious adherence to the natural laws which he explained, it was owing that he sustained himself for many years in a certain measure of health and exemption from suffering, while labouring under the consumptive tendency which finally cut short his career. The character of Dr. Combe made its best impression in his perfect simplicity, and the untiring energy of his practical benevolence. Here resided the true charm of his nature, and that which made him the beloved of all who knew him.

TESTIMONY TO MEDICAL MEN.

The following short notices of two esteemed members of the Provincial Medical and Surgical Association, Mr. Hiddleston, of Leeds, and Mr. Storrs, of Doncaster, both of whom have lately fallen victims to fever, are extracted from the local papers:—

"A most painful instance of this fatality to which medical men are especially exposed, has occurred within the past week, in the death of a most excellent and devoted young man, Mr. Hiddleston, of the Leeds House of Recovery. He had been the resident surgeon of that institution for eight years, and during that time he had had five attacks of fever. During the late pestilence, his exertions, as on all previous occasions, have been indefatigable. The poor have regarded him as a friend and a benefactor. He had kind services and gentle words for all. He was ever a welcome visitor in the homes of the humble, and his loss will be widely felt, and sincerely lamented. To his active and untiring exertions, in a very great measure, has been owing the efficiency of the hospital of which he was the medical officer, now one of the most excellent and useful charities in Leeds. Though his remuneration was of the slenderest kind, and, perhaps, necessarily so, he laboured for it as if in it were invested his sole fortune. He was indefatigable also in his exertions in aid of the literary institutions of the town; for some years acting as a member of the Committee of the Mechanics Institution, and also, as a volunteer lecturer, for which his richly-stored and highly-cultivated mind eminently qualified him. But this brave and devoted man has fallen at his post, and we mourn his loss as that of a hero."—*Leeds Times.*

"Amongst the numerous medical practitioners who have fallen victims to the virulence of the fever, brought into this country by the Irish immigrants, it is our painful task to record our sincerely lamented townsman, Mr. Storrs; he sank after an illness of about three week's duration. Mr. Storrs being the medical attendant of the Doncaster Union Workhouse, had been exposed during some months to the destructive influence of the epidemic famine fever; a less humane, a less conscientious man might have escaped unscathed. When we say that Mr. Storrs's assiduity and practical humanity would not allow him to neglect the meanest and poorest of his fellow men, we utter a truth which will find an echo throughout this town and neighbourhood. He has died on the field of duty, and goes to the grave with a character esteemed and respected by thousands. Mr. Storrs was in his forty-seventh year; he practised in this town upwards of twenty-four years, with credit and success. He has left a widow and twelve children to mourn the appalling loss of a devoted husband, and most affecfionate and anxious father."—*Doncaster Chronicle.*

The subjoined comments of the Editor of the *Leeds Times*, to which the loss of Mr. Hiddleston gives rise, are a just testimony to the merits of a large class of our medical brethen:—

"Let us do justice also to another class of men—ill-remunerated and hard-worked, almost beyond belief, save of those who know the extent of their labours;—we mean the medical attendants of the poor. These men brave death in all its aspects, often without the slighest hope of reward. Wherever they are called, they go; following and unshrinkingly doing their duty—often unthanked. They spend and are spent—labour and toil till their strength fails and their heart sickens, and then the fever fastens on them. Many are the surgeons in Leeds and in other towns, who have been stricken down by the pestilence which still stalks abroad among us. Generally they are the young; for it is, we believe, one of the conditions of the profession, that the young men commencing practice must first labour among the poorest classes, and this during the best years of their life."———

"How much more are men such as these to be esteemed than your great warriors and conquerors of the earth! One true man of this stamp is worth a whole wilderness of Railway Kings! And yet they pass silently thaough life, and fame never tells of them. The greatest heroes of all are men whom the world knows not of!"

Medical Intelligence.

THE LONDON AND PROVINCIAL MEDICAL DIRECTORY.

We trust that the announcement respecting the issuing of the circular, by the editor of this work, in a recent number of this Journal, has not escaped the notice of our readers. To assist in rendering such a work correct is for the advantage of every genuine member of the profession, and we would urge upon the members of the Provincial Association not to be behind others of their medical brethren in returning answers to the circulars, containing all such particulars as it is desirable should be known. No care nor attention on the part of the editor can avail in rendering the work what it might be, a faithful and correct index to the profession, unless the members will themselves give the information which is required to mark them distinctly, as legitimately belonging to it.

SANITARY COMMISSION.

Lord Robert Grosvenor, Dr. Southwood Smith, Professor Owen, Mr. Chadwick, and Mr. L. Jones, have been appointed Commissioners to inquire into the means necessary to be adopted for the improvement of the sanitary condition of London.

PROGRESS OF THE CHOLERA.

It is with regret that we have to announce the almost simultaneous appearance of the cholera in several provinces of Russia. Moscow, Smolensko, Plescow, Riga, and Odessa, are all suffering under the disease, and there is but too much reason to apprehend its spread throughout Europe.

TESTIMONIAL TO JAMES MASH, ESQ.

On Friday, (Sept. 10th,) a very handsome silver inkstand value forty guineas, was presented to Mr. James Mash, of Northampton, bearing the following inscription:—"This testimonial was presented to James Mash, Esq., House Surgeon to the Northampton General Infirmary, by the late pupils of that Institution, and some of the General Practitioners of the town and neighbourhood, as a mark of respect and esteem for his professional attainments and private virtues. Sept. 10, 1847."

A PATIENT BLED ONE THOUSAND AND TWENTY TIMES.

A young woman, in whom the menses became suppressed, suffered from severe hysterical symptoms, vomitings, and epileptic attacks, which nothihg was found to soothe and relieve but a small venesection; and in the course of three years, from the age of sixteen to nineteen, she was bled no less than *ona thousand and twenty times*, viz., eighty times from the foot, and 940 from the arm. All this she survived, but was cured by having to take a journey in a rough vehicle, which brought on the regular menstrual discharge, and she afterwards married and lived healthily for many years. *Recueil de Médecine*, 1757.

APPOINTMENTS.

William Henry Elliot, Esq., M.D., has been elected Physician to the Exeter Dispensary, in the room of Dr. Kingdon, resigned.

Dr. A. C. Brownless, of Charterhouse Square, and Dr. Goodfellow, of Bedford Place, Russell Square, hvae been elected Physicians to the Royal General Dispensary, Aldersgate Street, in the room of Drs. Peacock and Garrod, resigned.

Dr. Michel Levy, First Physician to the Military Hospital at Mayence, has been appointed First Physician to the Val-de-Grace, in the room of M. Alquié.

At a meeting of the Royal College of Surgeons in Ireland, held on Saturday, September 18th, Dr. Hargrave was elected Professor of the Theory and Practice of Surgery.

The title of Baron has been conferred on Dr. Seutin by His Majesty the King of the Belgians.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, September 16, 1847:—George Moseley, Hampstead; Samuel Burgess, Frodsham, Cheshire; Thomas Parker Rust, Wells, Norfolk.

Thursday, September 25:—Henry Lambden, Burgh, Lincolnshire; John T. Campion, Exeter; John Coghlan Haverty, Liverpool.

OBITUARY.

Died, Aug. 21st, aged 36, of fever, Richard Mackenzie Hiddleston, Esq., Resident Medical Officer at the House of Recovery, Leeds.

Sept. 2nd, at Trafalgar Cottage, Manor-Hamilton, aged 62, James Dundas, Esq., R.N., F.R.C.S.I., Surgeon to the Dispensary, and Medical Attendant of the Workhouse. Mr. Dundas contracted malignant typhus fever during his attendance in the temporary fever hospital. He was Assistant Surgeon of H.M.S. *Cyclops*, at the battle of Trafalgar, and on leaving the service he devoted a long and useful life to the cause of humanity and science; his loss will be long felt by the community and members of his own profession.

Sept. 5th, at Granard, aged 72, Dr. M'Cormick, Medical Attendant of the Union Workhouse.

Sept. 8th, at Carraroe, of fever, John B. M'Donough, Esq., Surgeon, employed under the Central Board of Health as Medical Officer for the seaside portion of the Outerard Relief District.

Sept. 9th, aged 49, Thomas Weatherill, Esq., M.D., Liverpool.

Sept. 14th, at Doncaster, aged 46, of fever, caught in

the discharge of his duties as Medical Officer to the Doncaster Union Workhouse, Robert Storrs, Esq., M.R.C.S.

Sept. 19th, at Honiton, aged 40, from tubercular deposition in the lungs, brought into action by an attack of typhus fever, James Campbell, Esq., M.D., Honiton.

Sept. 19th, at Baltinglass, of fever, John Johnston, Esq., Medical Officer of the Union Workhouse and District Fever Hospital.

Sept. 20th, at Perth, John Monteath, Esq., M.D.

Sept. 26th, aged 26, from fever, contracted in the discharge of his professional duties, John Oliver Curran, Esq., M.D., Dublin.

Lately, at Athenry, of fever, L. S. M'Calman, Esq., M.R.C.S.E., Medical Attendant of Dispensary and Constabulary.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

Gentlemen who have not paid their subscriptions for the current year, or who are in arrears, are requested to send the amount due to the Treasurer or the Secretary of the Association.

ROBERT J. N. STREETEN, Secretary.

METEOROLOGICAL JOURNALS FOR JUNE, 1847.

Kept at Sidmouth, by W. H. Cullen, M.D.; at Honiton, by Mr. Rogers; at Romsey, Hants, by F. Buckell, Esq.; at Uckfield Sussex, by C. L. Prince, Esq.; and at Harrogate, by G. Kennion, M.D.

		Sidmouth.	Honiton.	Romsey.	Uckfield.	Harrogate.
External Thermometer.	Mean at 9 a.m.	56.79	58.80	59.08	.	60.46
	„ at 9 p.m.	56.06	8p.m. 56.15	55.06	.	55,96
	„ of the Maxima	67.43	65.29	67.20	70.32	.
	„ of the Minima	51.05	48.25	48.70	47.30	.
	Absolute Mean	60 .50	59.00	57.96	58.81	58.21
	Mean of 10 preceding years	58.94	.	.	.	.
	Extreme highest	2nd 77.50	29th 80.00	3rd 78.50	3rd 82.00	28th 72.00
	„ lowest	23rd 43.50	12th 42.00	7th 38.50	7th 35.00	10th 48.00
	„ range	34.00	38.00	40.00	47.00	24.00
	Mean daily range	16.14	17.50	18.60	23.03	.
	Greatest ditto	25.00	.	3rd 28.50	.	.
	Least ditto	9.25	.	21st 9.00	.	.
	Maximum in the Sun	.	.	.	1st 92.00	.
	Minimum on the Grass	.	.	.	7th 30.00	.
Barometer.	Mean at 9 a.m.	30.165	29.53	29.333	29.973	29.807
	„ 9 p.m.	30.165	8p.m. 29.27	29.294	.	29.747
	Extreme highest	27th 30.540	1-2nd 30.70	1st 29.730	1st 30.47	1st 30.37
	„ lowest	14th 29.700	14th 28.94	14th 28.895	14th 29.57	15th 29.19
	„ range	.840	1.76	.835	.90	1.18
Dew Point.	Mean at 9 a.m.	51.80	.	50.810	53.12	.
	„ 9 p.m.	49.00	.	51.368	.	.
	Days fine	17	14	13	.	15
	„ dull and variable	3	.	.	.	.
	„ on which any rain fell	10	16	17	.	16
	Quantity of rain in inches	0.980	.	2.225	1.77	.
	Evaporation	.	.	3.710	3.35	.
	Thunder and lightning	.	.	15th & 18th*	.	.
	Prevailing Winds	N.W.	NW. W.	SW. NE.	SW.	NE. NW.

* The dates for May should have been 3rd and 29th.

TO CORRESPONDENTS.

Communications have been received from Dr. Cullen; Mr. F. Buckell.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

A LECTURE ON THE ACCUMULATIVE ACTION OF MEDICINES, WITH SOME REMARKS ON SLOW POISONING.

By James Johnstone, M.D.,

Fellow of the Royal College of Physicians, Professor of Materia Medica and Therapeutics at the Queen's College, and Senior Physician to the General Hospital, Birmingham.

(Delivered at Queen's College, Birmingham, Oct. 5, 1847.)

In the lectures on therapeutics which, during the last fifteen years, I have delivered at this Institution, I have frequently spoken of the *accumulative action* of medicines, or that power which they exercise over the animal economy by their continued operation when administered at short intervals, even in portions so small that no effect whatever would be produced by a single dose. To this subject, which has received less notice than it deserves from medical authors, I beg to call your attention.

The difference in character, as well as intensity, between the effect of a single dose of a medicine, and that of the same quantity of it when divided into several doses, and given at short intervals, is in many cases as striking as if two different substances had been employed. Thus, ten grains of calomel in one dose is a cathartic too powerful for most disorders that occur in this country; while a single grain of calomel, administered every night and morning for several successive days, till even more than ten grains have been taken, is very often prescribed as an alterative without much affecting the bowels. Again, two grains of tartarized antimony seldom fail to excite vomiting, but if a quarter of a grain be given at intervals of three or four hours, the medicine soon ceases even to nauseate, and becomes a powerful sedative and expectorant, which is advantageously given for the relief of inflammatory affections of the lungs and other viscera. In these instances the larger doses do not usually act accumulatively, because they irritate the intestinal canal, and therefore are not retained a sufficient time for that purpose. There are, however, other medicines of which the effect is increased, but not altered by their protracted operation: such are digitalis and iodine; the former being always sedative and diuretic, the latter a stimulant to the glandular and absorbent system, and an alterative.

Nothing in the treatment of disease is of more importance than this accumulative action of medicine, for while many disorders which do not soon or ever yield to the most active measures, may be cured by the gradual influence of remedies far more gentle in their first action, the physician is sometimes rather disconcerted at finding that his patient has been salivated by a few doses of mercury, which were intended to act upon the digestion only, or that the heart has almost ceased to beat, owing to the depression which digitalis, prescribed as a diuretic, may have caused. Indeed, the benefits which are now derived from the foxglove, were purchased at a cost of life by no means inconsiderable, before it was introduced into the "Materia Medica," and its power was properly estimated.

The facts which I have stated are well known; and though the physiological explanation of them may admit of doubt, I believe that the accumulative action of a medicine is always dependent, *either upon the chemical changes in the animal fluids which it may occasion when the system is loaded with it, or upon diminution of the nervous power, consequent on long continued depression of the nervous system.*

This classification might perhaps, with very little modification be applied to general therapeutics, for it is probable that most, if not all, of those medicines, which are not purely chemical agents, act primarily upon the nervous system; and I am inclined to think that the operation of some upon one organ especially, and others upon another, is owing to the peculiar sensibility of various sets of ganglionic and spinal nerves to appropriate stimulants—both natural and artificial,—such as we know to exist in the cerebral system; so that in the same manner as the optic nerves are affected by the light alone, and the auditory nerves by sound, the nerves of the kidneys are excited by diuretics, those of the uterus by emmenagogues, and those of the intestines by cathartics, as well as by the ordinary secretions. Upon the same principle, the action of these organs is impaired when any substance which can stupefy their nerves may happen to come in contact with them. A medicine may enter an organ, and circulate through its vessels, but unless it either effect some chemical alteration, or be fitted to act upon its nerves, the functions of the part are not disturbed. Hence we find the colour and smell of rhubarb and other substances in secretions, which are neither thereby increased, nor otherwise materially changed; although other functions may be at that very time under the influence of these medicines.

I.—Chemical Changes effected in the Animal Fluids, by the Accumulative Action of Medicines.

That certain medicinal substances are conveyed into the circulating system by absorption is an undoubted fact; for many of them, including salts of mercury, iron, silver, potassium, &c., have been detected in the blood itself, as well as in the secretions from it. The taste of iodine in the saliva, when it has been rubbed into the skin, a fact which I have often observed; the blue tint of the internal membranes, and the dark colour of the skin, of those who have taken nitrate of silver for a long period; the red bones of animals which have been fed upon madder, and numerous other instances of a similar nature, likewise evince the presence of mineral and vegetable medicines in the fluids and tissues. It does not, however, necessarily happen that medicines which are absorbed, act chemically; for some of them when once deposited, either exert no apparent influence on the animal economy, or only on the nervous system, having during their passage through the alimentary canal, lacteals, and blood-vessels, undergone changes which rendered them ultimately inert; whereas, many others retaining the power which they previously possessed, prove beneficial or prejudicial to health, as the case may be. Thus the continued use of alkalies in minute quantities, more effectually counteracts the disposition to form lithic acid than the largest doses occasionally administered; and upon the same principle, the invalid often derives more relief from habitually drinking the natural mineral waters, which hold in solution very small portions of various salts, than from any other medicine. By the accumulative action of such remedies, the constitution of the animal solids, as well as of the fluids, becomes gradually modified; and the morbid tendencies which may have previously existed, either remain for a time in abeyance, or are permanently removed.

Of these changes in the animal fluids, the cure of those diseases which affect the functions of nutrition and secretion on the one hand, and on the other hand the tendency of some medicines, such as iodide of potassium, turpentine and copaiba, to induce cutaneous eruptions, are evidence; and this is corroborated by the experiments of several eminent physiologists, who have shown, that when saline and other medicaments are mixed with blood, its colour and consistency undergo considerable alterations. But as Hewson very justly remarks, we must not conclude that the effects within the body, would be the same as out of it, and it must be admitted, that though we may be inclined to believe in the power of some preparations of iron to increase the quantity of globules in the blood, and to give credit to other instances of vital chemistry, equally interesting, yet such phenomena require further elucidation before we can claim an exact knowledge of them. Nevertheless enough has been done to prove that the efficacy of many medicines is dependent upon their chemical action, and that though in former times the practice of the humoral pathologists was often bad, their theories were not so far wrong as Hoffman and Cullen imagined.

II.—Diminution of the Nervous Power by the Accumulative Action of Medicine.

While the accumulative action of some medicines depends upon the chemical changes which they effect, it seems equally certain that the agency of others is entirely attributable to their diminishing the nervous power. The rapidity with which strychnine, and some of the other narcotic poisons, affect other animals, as well as man, can only be explained by the supposition that these substances possess a peculiar influence over the nervous matter, when brought into contact with it, and thus impair its functions. Changes in the structure of other parts of the body may, and often do, subsequently occur; but these I should, under such circumstances, regard as the result, and not the cause, of diminished nervous power. Indeed, the accumulative action of such medicines somewhat resembles the influence of long continued grief and anxiety of mind, which, by diminishing the energy of the nervous system, slowly, but surely, impede or pervert the organs of nutrition.

In cases of this class, the loss of nervous power is the first and leading characteristic, whether the agent, being absorbed, come in contact with the nervous system through the medium of the circulation, or by a more direct application to the nerves; and there can scarcely be a better proof of the mode in which this kind of accumulative action is produced, than the tendency of some medicinal substances, to cause paralysis and convulsions, with which, in many instances, the sufferer is afflicted for a considerable period afterwards. In a case related by Dr. Blackall, and mentioned by Dr. Christison, a person, while taking daily two drachms of an infusion of digitalis, was attacked with pain over the eyes and confusion, followed in twenty-four hours by diarrhœa, delirium, convulsions, and insensibility, with extreme depression of the pulse. The convulsions continued to recur for three weeks, with intervals of delirium, and at length he died in a convulsive fit.

The accumulative action of opium, of hyoscyamus, and of narcotics in general, may be explained upon the same principle. In shaking palsy, which, though excited by the fumes of mercury, often continues long after the individual has been removed from their influence, the ordinary symptoms indicate disturbance of the nervous system; while in most cases there is no salivation, nor are there any of those signs of disordered secretion and nutrition, which the salts of mercury commonly occasion. So likewise in paralysis from lead, the general symptoms show derangement of the nervous system, the black line along the gums merely proving that the metallic salt has been absorbed. These examples are, perhaps, sufficient for my present purpose, for, though they exhibit the *poisonous* effects of mercury and of lead, the principle of their accumulative action is the same as of medicines.

III.—Of Slow Poisoning.

Besides these which I have mentioned, there is

another mode of accumulative action, by which medicinal substances have acted as most deadly poisons. Amidst the various means which have been devised to take away life, it was some centuries ago discovered, that by irritating the alimentary canal, and thus disordering the digestive function, the habitual use of certain drugs, many of which are now very commonly employed in a different manner, and for a far different purpose, even in very minute doses, proved fatal. This, however, is the action of poisons, not of medicines, and therefore does not properly form a part of our present subject; but since nothing can more strikingly illustrate the power which medicinal substances may gradually acquire, I shall mention some of the most remarkable examples of slow poisoning, for reference to the greater number of which, as well as for several of the circumstances themselves, I am much indebted to the kindness of a very able and accomplished friend.

From the works of Theophrastus and of Plutarch, it would appear that slow poisoning was practised both by the Greeks and by the Romans long before the Christian æra. In some cases the nervous power was destroyed by narcotics; in others the digestion was impaired by irritating or corrosive drugs. Theophrastus, who died 288 years before Christ, says, it is asserted that a poison can be prepared from aconite so as to cause death within a few months, or even after a longer period; and that Thrasyas, of Mantinea, who seems to have been his contemporary, was acquainted with a mode of preparing other plants, so that small doses of them occasioned an easy death, though they induced no weakness for a long time after they had been taken. We are told by Plutarch, that Philip, the son of Demetrius, and king of Macedonia, wishing to put to death Aratus, of Sicyon, who was a distinguished general, desired one of his friends to administer poison, of a kind which caused lingering heat or fever, with a slight cough and spitting of blood, followed by gradual decay. This occurred about 213 years before Christ, and a few years afterwards, according to Livy, poisoning became very common at Rome. Among others, so says Tacitus, the Emperor Claudius, and his son Britannicus, were destroyed by this means. In both cases a slow poison, prepared by the infamous Locusta, and intended gradually to destroy the mental as well as physical powers, was administered, but as the patience of the murderers was exhausted before it took effect, a stronger dose was given to each of the victims, and they speedily perished. To Claudius the poison was at first given in a dish of mushrooms, but he was at last killed by a poisoned feather, which was put down his throat under pretence of making him vomit. Since the slow poison was not allowed time thoroughly to operate on these persons, it is doubtful what its effects might have been; and many of the symptoms which are described by the Greek and Roman historians, so much resemble those of some ordinary diseases, that in the absence of corroborative evidence, it might have been questioned whether the animal and vegetable substances that were used for this purpose really possessed the properties attributed to them. The fact, however, that the doctrine of slow poisoning was generally received, not merely by the vulgar, but by men of the highest literary attainments in the Roman empire, affords proof that such a mode of destroying life was known and practised nearly two thousand years ago.

The deleterious properties of aconite, hemlock, and the poppy, which were the poisons most commonly employed, are well known at this day; and the ingenuity of more recent times, while adding to the catalogue of poisons as well as of crimes, has sanctioned the belief of the ancients in their fatal and imperceptible influence.

The instances of slow poisoning which are on record from the fifteenth to the nineteenth century, are indeed so numerous, that I can only attempt a passing allusion to some of the most remarkable of them. Of all the adepts in this horrid science, none excelled Cæsar Borgia, who was born in the latter half of the fifteenth century, and died in 1507. Endowed with talents of the highest order, which he entirely devoted to the promotion of his own selfish views, Borgia unscrupulously removed all who might be obstacles to his ambition, or even to his slightest gratifications. For this purpose he sometimes had recourse to poison which was so insidious in its operation, and so indiscriminately employed, that he became an object of terror to those whom he called his friends, as well as to his open enemies. It is said that the poisons thus used were of two kinds,—the one being a solid, white, mealy substance, of which the composition is unknown; the other a solution of arsenic. It was believed, in the time of the Borgias, that the latter was the saliva collected during the dying agonies of a bear, which had been poisoned with arsenic; though this is not very probable, since that poison does not require such preparation to fit it for the destruction of man. At last Cæsar Borgia himself nearly fell a sacrifice to his own machinations, and his father, Alexander VI., actually died in consequence of having drunk some poisoned wine which was intended for three Cardinals who were their guests. The convulsions with which they were almost instantly seized, must, however, have been caused by a very active agent; though the subsequent painful illness of Cæsar, who swallowed an antidote, might have been the effect of a small dose of arsenic, for those who have taken it, and do not die within a few days, seldom fail to suffer from irritation of the stomach during months and even years afterwards, and may never entirely recover.

The Borgias being too powerful to fear punishment, frequently had recourse to more speedy means of removing their victims than by slow poisoning; and the most remarkable examples of this secret murder occurred at a later period. In the seventeenth century, slow poisoning was carried on to such an extent in Italy, that the public attention was attracted to the subject; and two women, of the names of Spara and Tofania, have acquired especial notoriety by their skill. It is generally supposed that they made use of a solution of arsenic, but the Abbé Gagliani asserts that Aqua Toffana was a mixture of cantharides and opium, which he adds is the surest of all slow poisons, and one which no one would avoid through suspicion,

because the liquor has no taste, and is as limpid as rock water. At first the patients did not suffer from it, but after some repetitions of the poison, they gradually lost the appetite, and became subject to gnawing pains in the stomach, followed by debility, disease of the lungs, hectic fever, and death.

The use of slow poisons was not, however, confined to the Continent; for a remarkable instance of it happened in this country during the reign of James Ist., in the murder of Sir Thomas Overbury, which was perpetrated in the Tower of London, by the orders of Viscount Rochester, and is mentioned by several of our historians. The unfortunate prisoner is said to have taken poison, in very minute quantities, with almost every article of his food. Cantharides and arsenic were mixed with the pepper and the salt; lunar caustic was rubbed over his meat; and when his health failed, poisoned jellies and preserves ministered to his fastidious appetite. His strength was obviously declining, but after this treatment had been continued for six months, Rochester became impatient; and his fears being excited lest Overbury should yet live long enough to divulge some unpleasant secrets of which he was in possession, the prisoner's existence was at length terminated, either by corrosive sublimate, or by suffocation, but by which of these means it is not quite certain.

In the year 1676, the Marquise de Brinvilliers was found guilty of several murders, and was executed at Paris. Having formed a criminal attachment to a man of the name of Sainte-Croix, who was afterwards suffocated by the fumes of some deleterious compounds which he was preparing, they resolved to relieve themselves from the power and remonstrances of the Marchioness's relations by poison; and her father was without hesitation sacrificed. The first dose of poison was given to him in soup, and M. d'Aubray suffered so much pain after it, that he sent for a physician, who considered the illness to be an attack of indigestion, and under that impression prescribed for him. M. d'Aubray continued, however, in great pain, and in the space of a few days he expired. Her father being thus disposed of, two brothers and a sister still lived to censure the conduct of Madame de Brinvilliers, and to share the wealth which had been left by their parent. These obstacles could not be endured; and the Marchioness, with "her accomplice, Sainte-Croix, decided that they should be removed." "But this time," says Dumas, "to avoid suspicion, it was necessary to employ a poison less rapid in its action, than that which had killed M. d'Aubray. They recommenced their experiments, not upon animals, lest the difference of organization might defeat their views, but in *anima vili*. The Marchioness was known as a pious and charitable woman, ever ready to relieve the distressed, and sharing with the Sisters of Mercy the attendance upon the sick, to whom she sent wine and medicine at the hospitals. Thus it caused no surprise to see her at the Hotel Dieu, distributing biscuits and preserved fruits to the convalescent; and her kindness was gratefully acknowledged. One month subsequent to this, she revisited the hospital, to enquire after some patients, in whose welfare she was much interested, and she was told that they had suffered a relapse, that fresh symptoms had supervened, that a deadly languor overcame them, beneath whose wasting influence they gradually declined. Of its cause she could learn nothing. The physicians told her that the disease was unknown, and defied their utmost skill. She again enquired at the expiration of a fortnight; some of the patients were dead, others still lingered in hopeless agony—animated skeletons, whose only signs of life were the voice, sight, and breath. Within two months all were dead, and medical skill was as completely foiled upon their examination after death, as it had been in their treatment."

Encouraged by this success, Madame de Brinvilliers commenced operations upon her brothers and sister. The sister escaped by leaving Paris, but one of the brothers expired in two months, and the other about five months after they had been subject to the influence of poison; the pain of the stomach, sickness, burning in the chest, anxiety of mind and exhaustion, as well as the disorganization of the stomach, intestines, and liver, observed on examination of the bodies after death, indicating corrosive action of the substances which they had been taking. There can indeed be no doubt respecting the nature of the poisons, for on the death of Sainte-Croix, corrossive sublimate, vitriol, antimony, lunar caustic, and opium, together with an acrid preparation, of which the chemical composition could not be detected, were found in his cabinet; while a paper, writtten by the Marchioness, and detailing many of her crimes was likewise discovered in his house.

Besides those just enumerated, Professor Baldinger, whose authority is quoted by Beckmann, states that sugar of lead was an ingredient in one of the most subtle poisons. "There is no doubt," he says, "that the slow poison of the French and Italians, commonly called *succession powder*, *(poudre de la succession,)* owes its origin to sugar of lead. I know a chemist, who superintends the laboratory of a certain prince on the confines of Bohemia, and who, by the orders (perhaps not very laudable,) of his patron, has spent much time and labour in strengthening and moderating poisons. He has often declared, that of sugar of lead, with the addition of some more volatile corrosive, a very slow poison could be prepared, which, if swallowed by a dog or other animal, would insensibly destroy it in the course of some weeks or months," without any violent symptoms.

In relating the foregoing cases, the limits of a lecture would not permit of my entering further into details, than was necessary to show what substances were used as slow poisons, and what symptoms ensued. These are the facts which illustrate the accumulative action of poisons, in contrast to that of medicines; and for fuller information, I beg to refer those who may be curious in such matters, especially to Beckmann's "History of Inventions;" to Mackay, on "Popular Delusions;" and to the "Crimes Célébres," of A. Dumas.

It is much to be feared that the crime of slow poisoning is by no means extinct. In the last century

it was certainly practised; for early in the reign of George the third, Mary Blandy was tried and hanged at Oxford for poisoning her father, by repeated doses of arsenic, and many still more recent instances are reported.

In most of the cases which I have mentioned, death took place in consequence of the destruction of the digestive powers, by the operation of corrosive poisons upon the alimentary canal, the symptoms of which I have several times witnessed, though in a very slight degree, when arsenic and nitrate of silver have been prescribed as medicines; and of the action of narcotics and sedatives upon the nervous system. Farther examples can scarcely be necessary. The formidable influence which medicines exert when administered so as to act accumulatively, ought to make us very seriously consider, not only the primary, but likewise the secondary and subsequent effects of whatever we may be about to prescribe; for although the frequent repetition of a small dose is acknowledged to be in many cases highly beneficial, it is equally true that some medicines may in this manner induce chronic inflammation of the nervous membrane of the stomach and intestines; that others may gradually impair the nervous power; and that a third kind may so change the composition of the animal fluids, as to substitute morbid deposits in the various tissues for those which are naturally formed by the process of healthy nutrition. Thus, while by judicious management, the accumulative action of medicines may be employed as a most efficacious mode of relieving many constitutional disorders, and especially those of a more chronic description, without proper caution we may lay the foundation of diseases, more mortal than those which it was our object to cure.

ON THE PATHOLOGY OF HOOPING-COUGH.

By T. Ogier Ward, M.D., Oxon.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

Sir,

In the number of the *Provincial Journal* for June 16th, there is a paper by Dr. Fife, of Newcastle, "On the Pathology and Treatment of Pertussis," to which my attention has been more particularly directed, by that disease having been rather prevalent lately in this place, and by my desire to ascertain whether any new light had been thrown upon its nature. In this expectation, I must say, I have been disappointed and it is because I agree with Dr. Fife in the importance of our having settled notions respecting its pathology, that I cannot adopt the view he has taken of its exclusively nervous character, an experience of nearly twenty years having convinced me that such a view is too narrow to be a safeguard for practice. I therefore venture to send you this letter as a kind of commentary and appendix to the theory, to which Dr. Fife has given the sanction of his name.

Dr. Fife sets out by stating his belief, that "the doctrine of the inflammatory nature of hooping-cough is advocated by the majority of the profession." I cannot coincide with him in such an opinion, if he means that the disease is considered as inflammatory in *all* its stages; and I believe that the opinions of the majority of practical men, besides those of a great host of authors, are opposed to its being *absolutely* of an inflammatory nature, or hyperæmic. Of thirty-eight authors, whose opinions are quoted by Dr. Copland, in his Dictionary, Art. "Hooping-Cough," eighteen considered it as an irritative disease, eight as purely nervous, and only twelve as inflammatory. It may be asked why, with such a number of the ideas of the learned recorded on this subject, I should presume to propound another hypothesis? My reply is, that not one of them, even including that (the best,) of the accomplished lexicographer himself, appears to me as being perfectly satisfactory in embracing and explaining all the phenomena of pertussis; for although some of them admit its specific nature, they do not trace the influence of the specific element through all the phases of the disease.

The gist of Dr. Fife's argument is to show that pertussis is distinct from bronchitis, and the major portion of his paper is occupied by the proofs; but while he shows pretty clearly what it is not, he does not define as evidently what it is, inasmuch as its pathology, as far at least as I can ascertain, is comprised by him in the following propositions:—

1st. The larynx is mainly implicated in the production of the paroxysm of cough, the chest being comparatively passive, and the violence and convulsive nature of the cough resembling that which arises from the pressure of foreign bodies in the larynx.

2nd. The hoop or whoop is physiologically requisite to compensate for the interruption which respiration sustains during a paroxysm.

3rd. The vomiting which terminates the cough, in all probability, has its origin in the participation of the stomach in the morbid condition of the larynx.

4th. Hence the actual seat and nature of pertussis are essentially referrible to some morbid condition of the pneumogastric nerve, which influences the secretion of the mucus so frequently discharged from the stomach.

Now, admitting the truth of the first proposition, the second is by no means a corollary to it; for, although a deep inspiration always follows the expulsive efforts of a cough, yet it is by no means "*physiologically requisite*" that this inspiration should be attended by a whoop; *pathologically*, however, it is requisite that the whoop should occur, as this is the characteristic of the disease. Again, as Dr. Fife has omitted to state in what consists the morbid state of the larynx, we are not much enlightened by the third proposition,—that the stomach participates in this condition, whatever it may be; nor is the conclusion respecting the pneumogastric nerve at all borne out by the premises that the stomach and larynx are equally affected. It may be so, but there is no proof given, physiological or pathological, that it is so. Even if we take it for granted that the pneumogastric nerve is the point *de départ* of the symptoms, Dr. Fife ought to have informed us how this morbid condition of the nerve has been produced.

But with the intention of contrasting pertussis with bronchitis, Dr. Fife has laid down six other propositions bearing on the pathology of the complaint, to which,

as they are still insufficient to complete its illustration, I have ventured to append *seriatim* an explanatory comment.

1st. "*Pertussis is essentially a disease peculiar to infancy and childhood.*"—Hooping-cough being one of the zymotic diseases, can only attack, as a general rule, the same individual once in the course of his life; and as it is readily "caught" and few persons enjoy an immunity from it, the younger members of the family are most liable to it, simply because the elder have already passed the ordeal; still there are many instances of persons advanced in life, suffering from the disease for the first time. Another proof that it is not *essentially* peculiar to infancy may be taken from the cases, by no means unusual, where, in large families affected with pertussis, the mother or nurse has been seized with a cough closely resembling that of the children.

2nd. "*The cough is convulsive, always occurs in paroxysms, and very often assumes a periodic type; and it commonly terminates in vomiting.*"—This proposition admits of no dispute, because until the disease has assumed these characteristics together with the whoop, we cannot say whether it be pertussis or mere bronchitis.

3rd. "*The patient is comparatively well during the intervals.*"—If, by "comparatively well," Dr. Fife means comparatively with patients suffering from mild bronchitis or simple catarrh, the expression may be correct in a degree, otherwise, it cannot be admitted that the majority of patients affected with pertussis, except in a slight degree, can be deemed well at all; for their almost constant leuco-phlegmatic appearance after the disease has existed for some time, clearly indicates that there is some great obstacle to the due oxygenization of the blood. Indeed the emphysematous state of the lungs in most fatal cases, whatever may have been the complications, militates strongly against such a favourable view of the condition of the patients during the intervals of the cough.

4th. "*It almost invariably occurs as an epidemic.*"—Pertussis being an infectious disease must necessarily prevail more or less in an epidemic form. Indeed, we have no right to assume that it is ever sporadic; for until we know the real nature of contagion and infection, we cannot assign limits of either time or space to their influence in pertussis more than in small-pox, and to admit this latter complaint to be sporadic would be to beg the whole question of its origin, which has been so long a subject of dispute.

5th. "*It is not attended with fever, or, when this occurs, it does not bear any proportion to the frequency or violence of the paroxysms.*—That pure pertussis is unattended by fever will scarcely be admitted as a general rule by those who know how difficult it is to distinguish it from bronchitis during the early part of its course. That the fever does not bear any proportion to the violence or frequency of the paroxysms is true, because these depend upon a cause that is not fully brought into play until the inflammatory stage is over.

6th. "*The whoop is lost as soon as inflammation of the bronchi begins.*"—From what has just been stated, I conceive this proposition is true only as far as it relates to intercurrent bronchitis, and not by any means constantly so even in this case; for we often observe the force and frequency of the cough aggravated by an accidental cold. I am, not, however, disposed to deny that a violent attack of bronchitis or pneumonia may cause a cessation of the whoop, which I should explain thus,—either that the new and violent action set up by the inflammation of the bronchi supersedes the specific disease; or that the mechanical irritation of the bronchi by the more acrid mucus, (the product of pure inflammation,) excites a slight and frequent cough, sufficient to expel the offending matter before it accumulates to so great an amount as to require for its removal a series of convulsive actions, such as are exhibited during a paroxysm of hooping-cough.

In accordance with, and supplemental to, the foregoing incidental remarks, I would describe pertussis as a zymotic disease, affecting primarily the mucous membrane of the air-tubes and the blood, and secondarily the medulla oblongata and respiratory nerves, producing a violent and convulsive cough, attended with a peculiar sound characteristic of the disease. I purposely omit from this definition the state of the stomach, as the complaint may exist in its perfect form without any affection of that organ; and I propose to devote the remainder of this paper, except a few words upon the treatment, to the completion of the arguments already adduced in support of this definition of hooping-cough.

If the essential character of zymotic diseases is that they are transmissible by contagion, which, exciting a peculiar ferment in the blood, renders it ever after incapable of receiving the same impression, and thus secures to the patient an immunity from future attacks, we have greater reason to claim the admission of pertussis among them, than that of any now grouped together in this class of complaints; for a second seizure by hooping-cough is far more rare than of small-pox, measles, or scarlatina. In each of these diseases we observe a local affection, attended with a constitutional disturbance of a febrile kind. In small-pox it is the dermis and deep seated portion of the mucous membrane of the tongue, fauces, larynx, and conjunctiva; in scarlatina it is the papillæ of the skin and tongue, and the mucous membrane of the nares and throat, with the tonsils; in measles it is the capillaries of the skin, and of the mucous membrane of the eyes, nares, and respiratory passages, that constitute the pathognomonic seat of the complaint. So pertussis affects the respiratory mucous membrane, and some pathologists would also include the gastric under its influence; and in like manner, its first invasion exhibits more or less of a febrile character, the symptoms of the early stage of hooping-cough being purely catarrhal. As in other zymotics there is always a state of indisposition that precedes the appearance of the characteristic eruption, so I conceive the dubious primary catarrh of pertussis serves as a forerunner to the outbreak of the perfect form of the disease, distinguished by the whoop and by a profuse secretion of mucus.

But the very term zymotic necessarily implies a diseased condition of the blood, the source of life and of all secretions; and although we shall probably never be able to ascertain what changes are produced in that fluid by the poison it has imbibed, nor wherefore each poison selects a peculiar locality for the display of its effects, still we cannot doubt that the blood, directly, by its properties or products, or

indirectly, by its action on the nerves and brain, is the exciting cause of the series of symptoms to which we give the name of pertussis. The disease, as has been stated, in the majority of cases, assumes the features of common catarrh, the chief distinction being a change in the voice, and an acute tone of the cough, according to Dr. Copland,—a difference far too slight to enable the medical attendant to decide upon the nature of the complaint, except during the prevalence of an epidemic, although the cough of pertussis has generally a violent convulsive character from the first. A little later, the diminished amount of febrile disturbance, which in pertussis subsides, but in catarrh and bronchitis augments, *pari passu*, with the violence of the cough, affords a better criterion; still the diagnosis can never be sure until the whoop has been heard, and with this sound the first stage of hooping-cough terminates, and the second is established.

As the symptoms of the first stage present few or no peculiarities, we cannot affirm that the pathology of pertussis at this period differs from that of bronchitis or catarrh, and the consideration of its specific nature would only embarass us, without throwing any light upon this point; we therefore may conclude that the disease, as in these affections, consists in an irritation of the mucous membrane of the air-passages, which, producing an increased secretion of mucus, excites the effort of coughing to remove the obstruction thus created to the access of air to the lungs.

The second stage, however, is remarkable for the occurrence of the whoop, which is so peculiar a symptom, and so distinguishing a characteristic of the disease, that an investigation of its causes, mechanical and physiological, must almost necessarily lead us to an explanation of all the other phenomena of hooping-cough.

As it is universally admitted that the whoop is produced from the larynx, a sketch of the condition of this organ in certain complaints,—as croup, œdema glottidis, and laryngismus stridulus, in which analogous sounds are heard, will serve to exhibit the mechanical cause of this symptom; but it is only by a reference to its specific nature, that we can account for its occurrence unattended by morbid changes, equal in degree or extent to those that are usually met with in the above diseases. In croup, it is the narrowing of the passage of the glottis and larynx, by the tumefaction of its mucous membrane, or by a fibrinous exudation, that makes both the expulsive, as well as the inspiratory, effort of the cough, liable to be mistaken for the cough and whoop of pertussis. In œdema of the glottis there is a still greater amount of contraction of the larynx; yet the expiration is pretty free, and it is only the inspiration that is attended with an abnormal sound, arising from the atmospheric pressure forcing inwards the swollen edges of the rima glottidis, and thus obstructing the passage. In laryngismus stridulus, or crowing inspiration, there is every reason to believe that the peculiar sound of the respiration is owing to a spasmodic closure of the larynx, although very great obscurity rests upon the pathology of this disease. Dr. Fife's comparison of the whoop to the pressure of a foreign body in the larynx, indicates its origin from mechanical obstruction. Again, if we try to imitate the sound, we can only do so by nearly closing the glottis at the same moment that we make an inspiratory effort. Lastly, if we apply our ear to the chest of a patient during the whoop, we find that very little air penetrates into the lungs. Moreover, the amount of morbid changes in the larynx found in fatal cases of pertussis, is quite insufficient to cause so great an obstruction to the entrance of air to the chest, being usually confined to a little thickening, with more or less redness of the mucous membrane; and, as no analogous sounds are produced in other diseases affecting respiration, besides those above mentioned, we are driven to the conclusion that the whoop, the characteristic of the second stage of pertussis, is produced by a spasmodic contraction of the glottis, and therefore is dependent upon some affection of that portion of the nervous respiratory system that presides over the motions of the larnynx.

The excito-motory system of the larynx consists of the superior laryngeal nerve, the afferent, and the inferior laryngeal or recurrent nerve, the efferent, together with the medulla oblongata, as the central sensorium or medium of communication between them. Thus the laryngeal receives an impression, and transmits it to the medulla, which instantly regulates the movements of the laryngeal muscles through their motor nerve—the recurrent; or, if the medulla be directly affected by an irritant, it may direct the motions of the larynx through the recurrent, irrespective of any impression from the laryngeal. Such an irritant I conceive to exist in the poisoned blood of pertussis, which also modifies the secretion of the respiratory mucous membrane, so as to render it preternatural in quantity and tenacity. Hence both the above modes of irritation are present in hooping-cough; for there is an increased secretion of a tenacious morbid mucus, that requires a series of powerful repulsive efforts for its dislodgement and expulsion from the chest; and these same efforts by loading the medulla with vitiated blood, impeded in its return to the lungs, so interfere with its function in the co-ordination of the muscular efforts of the chest and larynx, that the glottis still *preserves* its state of contraction, at the same moment that the chest is striving to expand itself for the re-admission of air to the exhausted lungs. I use the word *preserves*, because no efforts of coughing sufficiently powerful to expel the mucus can be made, unless the glottis be considerably contracted at the moment of expiration.

That congestion or irritation of the medulla oblongata is sufficient to produce the spasmodic contraction of the glottis that causes the whoop, we have a strong confirmation, in the source of crowing inspiration being frequently traceable to this cause; and in some cases the contraction is so energetic that it does not relax till after the death of the patient, which takes place in consequence of the spasm producing asphyxia. But we derive yet stronger arguments in favour of this view, from the consideration of many of the exciting causes of the paroxysms of hooping-cough, the influence of which is to be explained by their effect in inducing such a state of the medulla. Thus, all violent and sudden emotions, and their expressions, as crying, laughing, shouting, and all efforts, disturb the action of the heart, which either directly, or by re-action, expels the blood towards the head with greater force, and immediately excites the cough. Again, during sleep there is a tendency to congestion of the brain,

independently of the horizontal posture, which also augments it, and hence the cough is troublesome at night. It may be objected that similar causes will provoke an access of cough in other catarrhal affections, and especially in asthma; but, admitting this to be the case, I contend that the cough is not so easily excited, nor is it so violent in ordinary catarrhs as in pertussis, and the exception of asthma favours rather than opposes this view, as there is always a greater or less amount of cerebral congestion in the nervous form of that disease.

The prolongation of the paroxysms of coughing after the first series of expulsive efforts, and the consequent whoop have terminated, is to be explained by the persistence of some irritation, either of mucus in the bronchi, or of food in the stomach, for when these have been emptied of their contents, the paroxysm terminates. The consideration of this symptom of vomiting has hitherto been omitted, because it is neither peculiar to hooping-cough, nor invariably present, and because it is more or less an attendant upon all severe fits of coughing, from whatever cause, in many persons. Indeed, when we reflect upon the numerous sympathies of the stomach, besides its own affections, that may induce vomiting, it is almost impossible to fix upon any one sole cause of the symptom in hooping-cough; for instance, the vomiting may be the effect of the mechanical compression of the parietes of the stomach by the efforts of coughing, which also overcome the resistance of the other sphincters; or it may arise from the irritation of the larynx and bronchi, by the mucus being transmitted to the stomach, as occurs when the fauces and larynx are tickled by a feather; or from a similar transmission of the specific irritation by means of the par vagum to the stomach; or it may be the result of congestion of the brain by the cough, either simple or specific, producing its usual effect of vertigo and sickness. On these grounds the solution of this question may be fairly left for future discoveries. At present our view of the pathology of the cough is not rendered clearer, whichever we may adopt as being the cause of the vomiting that occasionally attends it.

From what has been stated, we may briefly recapitulate the series of events that constitute the pathology of pertussis in the following order of sequence:—Specific toxication of the blood, inducing irritation of the bronchi and increased secretion of mucus, and consequent congestion of the lungs; toxication, and congestion of the brain and medulla oblongata by the blood, now rendered still more vitiated by the pulmonary congestion, which, producing specific irritation of the respiratory nerves, renders them more easily affected by slight stimuli, and causes irregular contractions of the muscles under their influence, so as to produce a spasmodic cough of a peculiar kind.

By this view of the pathology of pertussis, its complications are easily explained. The head symptoms are the effects of the congestion of the brain, from the violence of the cough opposing the return of the blood to the chest. The abdominal complications also are mostly referrible to the same cause. Of the chest affections, some arise from the mechanical effects of the blood and air expelled from, and compressed with violence within, their vessels, by the efforts of coughing; others from simple congestion of the blood; while a third order arise from organic changes induced in the congested blood by the influence of accidental circumstances or hereditary predisposition. Hence it follows, that the morbid appearances in fatal cases of pertussis may be very various, though in my own experience congestion of the brain and lungs, with emphysema of the latter organs, have been most usually met with. I have never met with pure crepitation in pertussis, though mucous rattles, with bronchial respiration, are very common physical signs, and for these reasons, and that alleged by Dr. Fife, that the fever bears no proportion to the violence of the symptoms, I do not believe that hooping-cough must be attended, though it is preceded, by bronchitis; and therefore, when there is no fever present, I can only attribute the mucous rattle, to increased secretion from congestion of the lungs.

In order to complete our accouut of the pathology, it remains for us to shew by what means pertussis wears itself out during its third period, or that of decline. As it differs from the other infectious diseases in not being attended with any visible local manifestation of its action, we cannot state with certainty, how the blood casts off the zymotic element; but reasoning from the analogy of the rest, in which the breath, almost all the secretions, and more particularly the specific products of the malady, are contagious, we may infer that the emunctories of the body are the outlets by which the morbid products make their escape. Still there is no such speedy convalescence as we frequently see in the others; the cough may become rapidly less frequent and violent, but it does not cease suddenly, and leave the patient with nothing but debility to contend against. This slow convalescence, however, is quite consistent with the view that has been taken of the nervous nature of the cough, and it is well known how difficult it is for the system to shake off any habit of a convulsive kind,—as hysteria, chorea, and epilepsy; and the facility with which the disease returns under the influence of a common cold, or other irritation, even months after it is supposed to be cured, is a strong support to the idea of its essentially nervous character in the latter stages. I conceive, then, that the system relieves itself of the dregs of hooping-cough (to use a zymotic metaphor,) by the secretions; but the disease not having, like the other zymotics, any special organ except the bronchial membrane on which to exert its force, the purification of the blood, and hence the convalescence, is more protracted than in them.

With regard to the treatment of pertussis, in mild cases I have found that recommended by Dr. Fife, viz., emetics and sedatives, with an occasional mild mercurial to correct any disordered secretions, quite sufficient to carry the patient through the disease with comfort and safety. But when the cough is violent, the features puffy, the eyes bloodshot, and there is general oppression, with mucous rattles in the lungs, I cannot agree with Dr. Fife in his objection to depletion by leeches, (I have never used general bleeding,) as I find them to have frequently a most remarkable effect in relieving the congestion and mitigating the paroxysms when applied to the head and chest. Of the two modes, however, when both organs are affected, I have found most benefit from their application to the head.

It is chiefly in consequence of its leading to this

neglect of depletion, that I consider Dr. Fife's theory of hooping-cough as too exclusive to be a safe guide in practice, for congestion is so common, and inflammation (in which case alone he admits its necessity,) is so rare, a complication, that I greatly fear if we postpone our depletion till our patient has exhibited unequivocal symptoms of inflammation, our remedy will be applied too late to be efficacious.

The same principle should be kept in view in treating the complications,—viz., that pertussis is a congestive and not an inflammatory disease, except at its commencement; and even if inflammation do supervene, it is not of a nature to be treated by violent antiphlogistic remedies.

In conclusion, I would beg to recall to the notice of the profession, a plan that I have found signally useful in all complaints of the lungs, of children and infants especially,—viz., to change their position in sleep, in order that the blood may not gravitate too much to one side from lying too long upon it. The researches of Dr. Alison, in shewing the effects of inflammation in impeding the circulation of the blood through the capillaries of the lungs, and of M. Andral, in proving the tendency of congestiou to terminate in solidification, afford the true explanation of the benefit of this practice.

I am, Sir, your obedient servant,

T. OGIER WARD.

Kensington, Sept. 6, 1847.

EMPLOYMENT OF SPONGE-TENT TO DILATE THE URETHRA IN THE FEMALE.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

In the last number of the *Journal*, Mr. Worthington relates a case of successful extraction of a calculus from the bladder of a female by Weiss's dilator, and states, "that the process of dilatation was commenced at eight o'clock in the morning, and that at the end of every two hours he visited the patient for the purpose of giving the screw of the instrument from a quarter to half a turn." Having understood from those who have employed that instrument, that it occasions much pain, I have never used it in my own practice, but have preferred dilating the urethra with sponge-tent, which I have always found a safe, effectual, and easy mode of accomplishing the object. I have twice succeeded in this way in extracting a female catheter which had accidentally slipped into the bladder, with so much ease, that I should always adopt the same plan with confidence, for the removal of calculus or any other foreign body. The plan was as follows:—A sponge tent somewhat larger and longer than a female catheter was passed into the bladder, and allowed to remain eight or ten hours, by which time the urethra was sufficiently dilated to admit the passage of the finger readily into the bladder, and the introduction of a pair of forceps, by which the catheter was removed without any difficulty. In the first case the patient was not aware that the accident had happened; the catheter remained in the bladder fifteen days without producing any irritation, and the extraction was so easily effected that she was not conscious that any operation had been performed, and the bladder regained its power immediately. In the second, the catheter was retained seventeen days, during the whole of which period it occasioned much pain and irritation; nevertheless, on the fourth day after the extraction, the incontinence of urine ceased entirely.

I have repeatedly found the sponge-tent extremely useful in opening the neck of the uterus for the purpose of exploring its cavity, and for the removal of tumours. The introduction gives but very slight pain, and the dilatation is so gradually effected, as scarcely to be felt.

JONATHAN TOOGOOD.

Torquay, October 12, 1847.

REPORT OF THE DISEASES AND MORTALITY OF ROMSEY, HANTS.

By FRANCIS BUCKELL, Esq., M.R.C.S.

APRIL TO JUNE, 1847.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I herewith send the Mortality and Sick Registers, &c., for the second quarter of the present year.

It will be seen, by a comparison with the first quarter, that there has been a considerable decrease, both of sickness and mortality, (258 and 38, instead of 353 and 44.) There has also been a striking diminution in the number of *births*, (34 instead of 54.) The principal decrease has been under the head pulmonary diseases, (31 and 7, instead of 80 and 15.)

The *sick register* also shows a marked falling off in the number of fever cases, (42 instead of 72;) whilst the *mortality table* exhibits an increase under the same head, (7 instead of 1.)

The decrease in the *sick register* is chiefly seen in the *female* column; the number of females being 79, that of males only 16, *less* than during the first quarter.

The numbers under the head of diseases of the digestive organs are the same (68,) in the *sick table* as during the first quarter; in the *mortality register* there is a slight increase (7 instead of 6,) under the same head.

Of the six months, *January* was the most sickly, (160;) *June* the most healthy, (71;) the other months differed but little from each other, (93 to 100.)

		DEGREES.
Mean Temperature	of the 1st quarter	38.61
	,, 2nd ,,	53.10
		INCHES.
,, Pressure	of the 1st quarter	29.410
	,, 2nd ,,	29.297
Prevailing Wind	in the 1st quarter	N.E.
	,, 2nd ,,	S.W.

As the epidemic of measles has extended into July and August, I shall defer any observations respecting it until the next quarter.

I am, Sir,

Yours respectfully,

FRANCIS BUCKELL, M.R.C.S.

Romsey, August 16, 1847.

REGISTER OF DISEASE.

Second Quarter—April, May, and June.

	Names of Diseases.	Under one year.	1 to 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	Above 70	Male.	Female.	April.	May.	June.	Total.	
Cerebral Diseases	Hydrocephalus	3	2										5		3	2		5	8
	Meningitis	1											1		1			1	
	Other Cerebral Diseases																		
Diseases of Organs of Sense	Diseases of the Eye		1						1				2			2		2	2
	Laryngismus Stridulus		1											1				1	
	Catarrh and Bronchitis	2			1	1	2	2	1		1		7	2	6	1	1	9	9
Pulmonary Diseases	Asthma					2							2		1			2	
	Spasmodic Cough							2					2		2	2	1	5	31
	Pneumonia and Pleuro-pneumonia	2		3	3		3	1					6	3	3	1	1	6	
	Pleurisy						2						3	1	1	4	3	8	
	Phthisis				1	2	1		1	1			7	2	1	3	1	9	
	Quinsey						1						2	2	1	1		3	
	Dyspepsia						3	3	1	1	1		4	4	2	3	2	7	
	Hepatic Disorders		1		1	1	2		1	1	1		4	4	4	3	4	11	
	Diarrhœa	3	3			1	2	2	3		1	1	10	5	4	8	7	19	68
Diseases of Digestive Organs	Constipation	1	3	5	1		1			1		1	15	4	6	4	3	13	
	Colic	1									2		2	3	1	2		3	
	Worms		2	3	1								2	5	1	4		7	
	Entero-peritonitis						1	1					2	2	1	3	1	7	
	Other Diseases of Digestive Organs	3	1				2	1					5	2	3	1	1	5	
	Diseases of Kidneys				1	1	1	3			1		2	2	3	1	1	4	
	Eruptive Diseases	1		3	1	1	1						4	2	2	1	4	7	
	Scrofula		6	3	1	2	1						4	5	2	1	6	9	
	Dropsy (Cardiac)					2	2	1		1			4	1	2	1	2	5	
	Rheumatic Diseases			1		2	9	8	2	2	3		23	3	10	3	4	17	
	Remittent Fever		4	1									1	3	2	1	1	4	
	Continued Fever				1	1		1					2	2	1	1	1	3	
Fevers	Measles	4	21	6	1	2							18	16	19	11	4	34	42
	Hooping Cough		1										1	4		1	4	5	
	Debility						1	3	1		1	1	4	3	1	1	5	7	
	Uterine Disorders					2	1	1					2	4	2		2	4	
	Venereal Disorders						1	1					1	3	3	2	4	9	
	Miscellaneous			2	2	6	5	8	8	3	2	6	28	8	10	13	13	36	
	Total	22	46	27	13	23	41	38	20	10	12	6	162	96	93	94	71	258	

The above table is compiled from the Parish Register, and the List of Cases which have occurred in my own practice.

FRANCIS BUCKELL, M.R.C.S.

REGISTER OF MORTALITY.

Causes of Death.	Under one year.	1 to 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	Above 70	Male.	Female.	April.	May.	June.	Total.	
Cerebral Diseases. Convulsions	1	1	:	:	:	:	:	:	:	:	:	1	1	:	2	:	2	7
Cerebral Diseases. Hydrocephalus	1	2	:	:	:	:	:	:	:	:	:	1	2	:	3	:	3	
Cerebral Diseases. Diseases of the Brain	:	1	:	:	:	:	1	:	1	:	:	:	2	:	2	:	2	
Pulmonary Diseases. Phthisis	:	:	:	:	:	1	3	:	:	:	:	1	3	2	1	1	4	7
Pulmonary Diseases. Pneumonia	:	1	:	:	:	:	:	:	:	:	:	1	:	1	:	:	1	
Pulmonary Diseases. Pneumonia and Pleurisy	:	:	1	:	:	:	1	:	:	:	:	1	1	:	1	1	2	
Diseases of Digestive Organs. Dentition	1	2	:	:	:	:	:	:	:	:	:	2	1	1	:	1	3	7
Diseases of Digestive Organs. Diarrhœa	2	:	:	:	:	:	:	:	:	:	:	2	:	1	:	1	2	
Diseases of Digestive Organs. Worms	:	1	:	:	:	:	:	:	:	:	:	1	1	:	:	1	1	
Diseases of Digestive Organs. Muco-Enteritis	:	:	1	:	:	:	:	:	:	:	:	:	1	:	:	1	1	
Disease of Heart, &c.	:	:	:	:	:	:	:	:	:	1	:	2	:	2	:	:	2	
Dropsy	:	:	:	:	1	:	:	:	1	:	:	1	:	1	:	:	1	
Cancer (of Liver and Stomach, &c.)	:	:	:	:	:	:	:	:	:	1	:	:	1	:	:	:	:	
Premature Birth	1	:	:	:	:	:	:	:	:	:	:	:	1	:	:	:	:	
Fevers. Measles	2	4	:	:	:	:	:	:	:	:	:	2	4	5	:	1	6	7
Fevers. Typhus Fever	:	:	:	:	1	:	:	:	:	:	3	4	:	:	:	3	1	
Old age and general decay	:	:	:	:	:	:	1	:	:	:	:	1	:	1	:	:	1	
Found drowned	:	:	:	:	:	:	:	:	:	:	:	1	:	1	:	:	1	
Total	8	12	2	:	2	1	5	:	2	2	4	19	19	16	10	12	38	

Second Quarter—April, May, and June.

This foregoing Table and the Table of Births which follows, are taken from the Parish Register of Romsey.

REGISTER OF BIRTHS.

BIRTHS.	*April.*	*May.*	*June.*	*Total.*
Male.	4	4	9	17
Female.	5	4	8	17
Total .	9	8	17	34

CASES FROM PRIVATE PRACTICE.

By John Richard Wardell, M.D., Edin.;

Late President of the Royal Physical and Hunterian Medical Societies, Assistant Pathologist in the Royal Infirmary, Edinburgh, &c. &c.

(*Continued from page* 549.)

On a perusal of the first of these cases, it is seen that the patient was a young and somewhat chlorotic-looking girl. The affection, as in children, came on with great suddenness. There was a degree of attendant spasm in the muscles proper to the chest, as evinced by the sensation of constriction experienced when full inspiration was attempted. The stethoscope at once proved that the disease was not in the chest, but in the larynx, notwithstanding the sense of pain in the chest, and this was the partial closure of the glottideal chink. The bleeding produced relief by its induction of general relaxation. On the night of the 8th inst., she had no return, nor on the morning of the 9th were there any pyrexial symptoms indicative of the existence of inflammatory action. The paroxysms which subsequently came on during that day, were in a moment, and during their continuance, as seen from the reports, there were hysterio-epileptical symptoms, in addition to those immediately produced by the asphyxial condition under which she laboured. It has been said that damp and cold have nothing to do with the production of laryngismus stridulus, and that croup, on the contrary, is mainly brought on by these conditions. It is quite clear from the above cases that the first of these statements is incorrect, as in both instances wet and cold were the exciting causes. The girl, Cooper, had been employed most of the day on which her illness commenced in pumping and carrying water out of the house, which had come in during a great flood of an adjacent stream, and her feet had been wet for some hours. The boy stated, that the day before his attack he was thoroughly wet, and on the following morning he had in a great measure lost his voice.

The instance of John P——— supplies a good example of one of those cases but rarely observed, of distinct hysterical symptoms in the male. When such become manifest in this sex, (the male,) it is about puberty, when the generative organs, and the body generally, undergo a great change, or in the persons of nervous and excitable young men, though cases have been recorded of distinct hysteria occurring in a stout plethoric man. Sydenham, Hoffman, Whytt, Ferriar, Villermay, Georget, Conolly,* etc., favour the opinion that undisputed hysteria may occur in the male; when in this sex it is never, however, so unequivocally developed as in females, perhaps owing to the greater mobility which there is in the latter than the former. The present writer knows a married gentleman, of two or three and thirty years of age, who at times is decidedly hysterical, being often somewhat melancholic, highly irritable, has the globus hystericus, etc., rendering no doubt, whatever, as to the nature of the affection. During the paroxysms John P——— presented much the same kind of symptoms as the girl Cooper. There was slight lachrymation, a sensation of choking, a wild incoherent-like tossing, with great difficulty of breathing, and a congested state of the countenance, which demonstrated asphyxial symptoms. The hands were suddenly clinched, and the inferior extremities involuntarily moved in convulsive twitches, and he intimated that he felt a painful tightness at the chest and throat. From these facts, then, it would be difficult to dispel the opinion of there being evidence of true hysteria present, with whatever other conditions associated.

Respecting the treatment of the two cases, it is quite undeniable that medicines which produce a ready sedative and antispasmodic effect upon the nervous system constitute the class of remedies most correctly indicated. Our object is to overcome the morbid irritability which there is in the nervous centres, and when the paroxysmal attacks have subsided, to strengthen the system by means of tonics, of which the mineral kind are the best, especially the preparations of iron. Both it is observed were bled. Blood-letting was had recourse to on two accounts,—first to relieve the congested state of the vital organs, especially the lungs, which had been induced by the imperfect aëration of the blood, as evinced by congestion of the features, sense of suffocation, incoherence, etc.; secondly, to promote general muscular relaxation, thus overcoming the spasmodic rigidity in the muscles proper to the larynx, and therefore averting the dangers of immediate suffocation. Unless absolutely indicated by the imminent peril of the patient, there can be no doubt whatever that the abstraction of blood in chlorotic women is not good practice, and indeed we should then always avoid having recourse to the lancet when other remedies can be safely substituted, for the more we bleed the greater will become that mobility of the nervous system, which is the prelude to, or perhaps the main cause of, these conditions. It is true, however, as all men of experience must acknowledge, that under these kind of affections, delicate young women will occasionally endure, not only with impunity, but be benefitted by the loss of large quantities of blood.

An instance illustrative of this assertion was supplied during the last few weeks. Martha C———, a young woman, aged 23, hair dark, of somewhat waxy complexion, and hitherto of delicate health, was, after having rigors and slight nausea, attacked with very acute pain in the abdomen, which was increased on the gentlest pressure. The pulse was full, quick, and of good strength; the skin rather hot, but not dry. Perceiving her chlorotic condition, and being informed by her mother that the abstraction of a very small quantity of blood, not more than four ounces, a short time previously, had induced a most alarming syncope, I was led to give a large

* "Dr. Copland's Med. Dict.," Art. Hysteria, Sec. 40.

dose of calomel and opium, and ordered sinapisms, hot applications, etc., to the abdomen and inferior extremities. She still complained of much pain, and in a very distressing manner tossed about in bed, whilst the appearance of the countenance and her general aspect manifested characteristics of that protean malady—hysteria; yet these were so mixed up with other symptoms, and of such an anomalous description, as to leave some degree of doubt as to the diagnosis. The opiate was repeated within an hour, although she would now instead have been bled, had it not been at the particular solicitation of the mother, who begged earnestly that I would try any other means except blood-letting, at the thoughts of which she was considerably agitated, owing to the circumstance before mentioned. She now had what was equivalent to nearly 100 drops of laudanum, but without producing scarcely any relief; I therefore determined to bleed, by a large orifice, to syncope, if the pain did not abate on a less powerful impression being made on the circulation. This, it was to be anticipated from the mother's statement, might be done by a slight loss of vital fluid. Twenty-four ounces were, however, taken before much benefit was produced, or the pulse markedly affected; she then became for some few minutes faint, and afterwards expressed herself as better. Two grains of powdered opium were given, with five of calomel, and in the course of two or three hours she was much easier, the tenderness in a great measure having vanished. On the following morning another paroxysm came on, which fomentations, etc., alleviated. The blood was not in the slightest degree buffed or cupped, and the crassamentum was proportionately less than normal. Two days subsequent to this a hurrying message intimated that she had again very suddenly become affected with pain, indeed the informant said she was dying. On reaching the house several of the neighbours were assembled to witness, in their opinion, the fast approaching struggles of dissolution. The pain had now migrated to the chest, and she gave expression to her suffering in piteous cries, which were most distressing to those around. She felt so tight about the chest and throat, that she was as if suffocating, and on each imperfect expansion of the thorax violent lancinating pain was experienced. The countenance was anxious, expressive of much obstruction in the circulation, and although the pulse was of tolerable strength, yet a general review of the case impressed me with the conviction of her being in a precarious condition. Profiting from the experience of her last attack, and from such not having much confidence in any other methods except the lancet, it was at once determined to overcome by the induction of syncope the spasmodic rigidity which there was in the muscles proper to the respiratory functions. Another large basin of blood was taken with immediate advantage, although the relief was not so continuous as might have been desired. Other adjuvants, as calomel and opium, an antispasmodic enema, composed of turpentine, solution of morphia, and the fœtid tincture, sinapsims to the dorsal region of the spine, fomentations, etc., were employed. It may here be remarked that there was now no pain in the abdomen, but the affection was solely located in the thorax, extending to the throat. She had one or two other attacks, and was treated in a similar manner.

This case terminated in fever, and might be considered as hysteria engrafted upon that disease; nor is it a very uncommon thing for the initiatory stage of fever to assume such complications in pale chlorotic looking girls.

Some few months ago a young lady was suddenly taken with violent spasmodic pains in the epigastrium, and she also bore considerable doses of opium, nor was she relieved until blood-letting was also employed: her case too terminated in fever. When it is recollected that according to the Cullenian theory the brain and spinal marrow are the first organs which become affected with the poisonous agent, it may easily be conceived that the organic nervous influence will participate in the morbid impression, and that the manifest characters of such impression will be determined mainly according to particular predispositions of certain parts; hence where there is great mobility of the nervous system, and proclivity to hysteria, this complaint would be likely to become developed during the disturbance created in the system in incipient fever.

To return to the question of blood-letting in the cases particularly under consideration. I am fully aware, as has already been advanced, that to bleed chlorotic patients for their anomalous pains, as a general rule, is neither in accordance with physiological and pathological deductions, nor borne out by experience; yet, in instances like that of Cooper, where considerable spasmodic action existed in a vital part—the air-passages, and that of Martha C——, where the muscles proper to the respiratory functions were in a rigid fixity, tending in both cases to asphyxia, a less evil is had recourse to, in order to prevent a greater; for in cases of such emergency, our main object is to avert present danger, and relieve existent suffering. It was requisite, as observed, to produce an immediate and powerful impression upon the heart's action, and thus by lowering the circulation, overcome the resistent spasm in the muscles directly essential to life, which could only be done by copious depletion. That the practice was correct seems evident, from the successful results by which it was followed. Whenever we bleed, we should ever be guided by the condition of the pulse, and in all of these cases it was of good strength; and it may be taken as a general rule, when it feels hard, as it did in these intances, (depending upon visceral engorgement,) the lancet is indicated. Proving that the blood was highly venoid, the first portion of that emitted from the arm of John P——, was of a tarry description, and so inspissated, that it would scarcely flow from the vein.

The anti-spasmodics employed in both cases were of essential service. The strong liquor of ammonia applied to the throat was exceedingly useful, and tended to cut short the paroxysm. The inhalation of the vapour of hot water, impregnated with laudanum proved

very advantageous, and as an adjunct should never be omitted. During one of the paroxysms of Esther Cooper, the finger was freely rotated in the fauces, which produced an effort to vomit; she then obtained a full inspiration. On the whole, it is evident that these cases should be treated on general antispasmodic principles, blood-letting being avoided if such can be done with safety when the patient is chlorotic, and such other measures be had recourse to, as may seem likely to supply its place.

In conclusion, from the few cases which I have seen of this peculiar affection, the following deductions seem important to be remembered:—

1st. In the young, it may be detected from croup by the suddenness of its supervention, occurring in a dry and warm atmosphere, where perhaps, no cases of croup are to be observed; by the intermissions of natural breathing; by its taking place at the time of teething, or where there is some obvious source of nervous irritation; by the entire absence of pyrexia, and by the non-existence of the traces of inflammatory action after death.

2ndly. In adults, it comes on as quickly as in children, occurs generally in the persons of hysteric females, is diagnosed from laryngitis, by the absence of fever during life, and of lymph on the parts after death, and by its sudden mode of accession, by the great utility of an antispasmodic, and the inoperative effects of an antiphlogistic, mode of treatment.

3rdly. In the paroxysms it can be distinguished from epilepsy by the absence of foaming at the mouth, and biting the tongue, and by the intellectual faculties remaining entire, together with the positive symptoms before described.

Lastly, on application of the stethoscope to the lateral aspects of the larynx, a loud whistling noise is heard, as if produced by blowing through a small pipe, or when a stream of air forcibly passes through a narrow aperture; hence by these positive signs, and negatively by the absence of bronchial murmur in the thorax, it is broadly distinguished from bronchitis, the only other affection with which it might be confounded.

(To be continued.)

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, OCTOBER 20, 1847.

There is a point beyond which the farther endurance of burdens and injuries oft repeated becomes intolerable, and where resistance once fully roused, can scarcely fail to bring relief. To this point we think the contumely and neglect with which the just claims and remonstrances of the medical officers of Unions have been systematically received, are rapidly tending to, and at last working out, their own remedy. The fractional weight has been added to the load which renders it no longer bearable—the last drop of water which causes the cup to overflow. However Boards of Guardians may strive to force from their medical officers the utmost complement of service, for the lowest amount of salary,—and however the weaknesss, or apathy, or both, of Poor-Law Commissioners, may for a time suppress the demands for relief, a period must come (we trust it is now come,) when the grievances of the Union officers, so long unattended to, will be at length redressed.

We have before us a statistical document, furnished by Mr. F. S. Garlick, medical officer for the Halifax District. It is a summary of the visits and medicines supplied to the Poor-Law patients of the district during the quarter just ended. The area of the district is 990 acres; the population 19,981. The number of fresh orders received from the relieving officer during the quarter was 186, averaging 14.3 new cases per week; the number of visits paid was 685, averaging 50 per week, or deducting the last two weeks of the period when Mr. Garlick was ill from fever, and able only partially to attend to his duties, and drawing the average from the first eleven weeks, 58 per week. The medicines and appliances supplied during the period, mixtures, pills, powders, &c., each of which requires time and attention to prepare, leaving expense out of the question, were 4070, or 313 weekly. Now, the amount of salary awarded for this expenditure of time and funds, and for the medical skill which directs them, is twenty pounds; or one pound ten shillings and ninepence per week, (4s. 4½d. per day,) for taking charge of upwards of 14 fresh cases, preparing and giving 313 medicines, &c., and paying 58 visits, in "courts, lanes, alleys, cellars, garrets, and crowded lodging-houses,—places which baffle all description, but which may truly be pronounced sinks of misery, filth, and destitution;" and we may add, from fatal experience, sources of malignant infection, in seasons of epidemic disease, which expose the medical officer to almost certain attack, and too often to the sacrifice of life itself.

Such is a simple statement of the facts of the case, certainly not an exaggerated one, and we only want a few more such reports as those drawn up by Mr. Garlick, from other towns and districts in different parts of the country, to render manifest by incontrovertible evidence the extent of the evil.

The pressure of this evil has long been endured; it is now, we trust, working out a remedy, and among the first effective step to its removal, must be the bringing together of the

medical officers of Unions. A requisition, headed by the Committee appointed at the Anniversary of the Provincial Medical and Surgical Association, at Derby, in August last, for holding a General Meeting in London, will be found in another part of this number, and we trust that all those who take interest in this question, and are able to attend, will make a point of doing so. This meeting, to be really effective, should be numerous, and deputations should be sent from different districts throughout the country. We earnestly beg the attention of the Members of the Association and others of our readers to this point; but the Union medical officers must not stop here. District meetings at each county or central town should also be held, that those who have not the opportunity of attending the meeting in the metropolis, may strengthen with their aid the efforts of their brethren. Let them come prepared also with such documents as those furnished by Mr. Garlick,—the records of their Poor-law practice for the last quarter; and backed by such evidence, their remonstrances cannot fail of impressing the Government and the legislature, and we will fain hope, the entire country.

Review.

On the Causes and Treatment of Abortion and Sterility: being the result of an extended Practical Inquiry into the Physiological and Morbid Conditions of the Uterus, with reference especially to Leucorrhœal Affections, and the Diseases of Menstruation. By James Whitehead, F.R.C.S., Surgeon to the Manchester and Salford Lying-in-Hospital. London: 1847. 8vo. pp. 426.

The subject of the treatise before us requires no introduction; it at once challenges our attention, and for the purposes of this notice it is only requisite to see in what manner it has received illustration from the labours of the author.

The work is divided into ten chapters, in the first two of which what may be termed the physiology of the subject is treated of, under the heads of menstruation, and conditions which principally influence menstruation at its commencement. In the three following, the diseases of menstruation; the last menstrual crisis; and the signs of pregnancy, are considered. The sixth chapter is devoted to the statistics of abortion; the seventh, eighth, and ninth chapters, to the causes of abortion; and the tenth chapter treats of sterility.

It is of importance to the elucidation of all disease, whether functional or organic, that healthy function and structure should first be fully understood, and in reference to so important an aberration of the generative functions, Mr. Whitehead has done wisely to bring the subject of menstruation prominently forward. The attempt to investigate the causes of abortion and sterility, would be futile were so important a function as that of the catamenial discharge left unnoticed. The intimate connection of this periodical flux with the female reproductive functions, renders an extended examination of its healthy state, and of its aberrations, whether in quality, quantity, or period of occurrence, indispensable to a right understanding of the circumstances which influence those higher functions, to the elaboration of which, in the human female, the process of menstruation would seem to be specially essential. The physiology and diseases of menstruation, form in fact, a most essential part in the history of those diseases of the womb, which the author describes as tending to abortion and sterility. Thus, in Case I., of alleged pregnancy or pseudo-pregnancy, with regular menstruation, (see p. 37,) the menstrual fluid was found to proceed entirely from diseased surfaces on the cervix uteri, the abdominal enlargement being occasioned by congestion of the vessels of the uterus and neighbouring organs. Cases II. and III. are of similar nature, and others will be found narrated, which are illustrative of the same remark.

We have, however, no intention of entering at any length into this preliminary part of the treatise, as we are desirous rather of developing the author's views on the main object of his work; but before proceeding to the examination of them, we would briefly direct attention to the interesting observations on the effect of climate on the time of the first appearance of the menses. The researches of Mr. Roberton on this subject are well known, but the conclusions at which he has arrived, do not seem to be borne out by the investigations of Mr. Whitehead. From the latter there appears some reason to believe that a warm climate has an appreciable effect on the early development of puberty, and whatever view we may be disposed to take, a sufficient amount of evidence is brought forward to shew that the entire subject requires renewed examination before coming to a decided opinion upon it.

The average duration of the child bearing-period in this country, is, according to Mr. Whitehead, about thirty-two years,—that is, from the age of fifteen and a half, to that of forty-seven and a half, during which, according to his observation, the uterine functions are in a state of activity; but from a table constructed for the purpose, it would seem that the *aptitude* for child-bearing ceases some five or six years before the termination of the child-bearing period. Thus in thirty-eight women, the average age at the last appearance of the catamenia was found to be 47.54 years; the average age at the time of the last delivery was 41.73 years, giving a period of nearly six years, during which the menstrual functions were performed after the

procreative function had ceased to manifest itself. From another table of the commencement of child-bearing in 541 married women, it appears that the average age was 21¼, which taken from 41½ gives twenty years as the actual duration of the child-bearing period in this climate. The average period of conception in these cases was about two months and a half after marriage.

These preliminary considerations lead to the examination of the average number of pregnancies, and the proportion of abortions, occurring during the period of child-bearing. The conclusions arrived at, from the examination of two thousand married women, are, that at the average age of thirty years, or near the middle period of child-bearing, the average number of pregnancies actually terminated, was 4.38 each; 747 of the whole number had aborted at least once, and the average number of abortions was 1.63 to each of the 747. Of sixty-four women living in wedlock, until after the final menstrual crisis, fifty-six, or 87 per cent. had experienced abortion. Mr. Whitehead is "inclined to believe that the third, fourth, and subsequent pregnancies, and one or two of the last,—those, namely, which occur near the termination of the fruitful period,—are most commonly unsuccessful." The greatest number of abortions amounting to more than two-thirds, took place at three and four months.

A tabular view is given of the conditions associated with abortion, in 378 cases of abortion, occurring in immediate succession, which we are informed was examined principally with a view to obtain a correct statistical average of the prevailing causes. From this table, which is introductory to a consideration of the causes in detail, it appears that the abortion was attributable to, or connected with:—

Accidental agencies	in 42	cases.
Placenta prævia	8	—
Constipation of the bowels	3	—
Retroversion of the uterus	3	—
Incurable disease	1	—
Vascular congestion	15	—
Disease of the lower part of the uterus	275	—
Obscure causes	29	—

It is unnecessary to follow the author in his examination of the whole of these causes, and contenting ourselves with referring to some very instructive cases of the influence of a congested state of the uterine vessels in the induction of abortion, and the effects of an appropriate plan of treatment in arresting and controlling the same, we shall at once proceed to the examination of that which is the most frequent of the causes enumerated, and consequently, regarded in this point of view, the most important.

Of the 378 cases then, 275, or nearly three-fourths, were attributable to, or occurred in connection with, a diseased state of the lower part of ihe uterus. These 275 cases were, with a very few exceptions, examined with the speculum; and in every case thus examined, disease either of the lower or of the internal part of the uterus, and in a few instances of the vagina, was found to exist. The symptoms enumerated as denoting this diseased state are—leucorrhœal discharges, whether simply mucous or variously mixed with purulent, sanious, and bloody discharges; indefinable deep-seated aching of the lower belly; fixed pain of the groins in the situation of the inguinal canal; aching of the loins and sacrum; sense of bearing down; rigor, lassitude, and remittent fever.

Leucorrhæal discharge is now admitted to be very generally dependent upon disease of the os and cervix uteri, and to Dr. Henry Bennet, the profession in this country are mainly indebted for the introduction and dissemination of correct ideas on the subject. The effect of this diseased state in the production of abortion is another addition to our knowledge, the first announcement of which was, as far as we know, also made by the same excellent observer, and the views to which Dr. Bennet originally directed attention, in his work "On Inflammation of the Cervix Uteri," and afterwards, more fully, in the *Lancet*, receive additional confirmation and support in a paper recently read by Dr. Edwards, of Bath, before the Bath Pathological Society, (*Provincial Journal*, Sept. 8, p. 457,) and especially by the independent researches of the author of the volume before us. Into the question of priority it is not our intention to enter further. A letter from Dr. Bennet, setting forth the history of his own experience, and that of MM. Boys de Loury and Costilhes, on the point in question, will be found in another column; and Mr. Whitehead, in his letter of the 14th September, (*Provincial Journal*, Sept. 22, p. 530,) admits the claim of Dr. Bennet to priority of publication, while he contends for the originality of his own views as derived from a series of investigations carried on for many years past. The fact itself, however, is one of vast importance, and we cannot but think, that as far as that is concerned, the conclusions almost simultaneously arrived at from investigations independently carried on by Dr. Bennet and Mr. Whitehead, are thus materially strengthened.

We will now mention in support of these views, that of 1116 cases of pregnancy, observed by Mr. Whitehead, in which leucorrhœa existed, there were 575 abortions, or upwards of one half, in which *no cause* for the abortion could be assigned; while in 884 cases of pregnancy in which there was no noticeble vaginal discharges there were 172 abortions, or about one sixth, from *specified* causes. The effect of the severity of the uterine disease, as shown by the character of the leucorrhœal discharge, appears from the circumstance, that in 936 of the leucorrhœal cases, in which the discharge was purulent, the number of abortions was 544, or considerably more than half, while in the remaining 180 cases in which the discharge

was more of a mucous character, the number of abortions was only thirty-one or about one-sixth.

The observations on the preceding subjects have extended so far as to preclude us from entering on that of the last chapter—sterility. We have only, therefore, in concluding the notice of Mr. Whitehead's treatise, to do justice to its author, by re-commending the entire work to general attention, as containing many instructive details, and as one from the perusal of which, much valuable information, on a most important subject, cannot fail to be derived.

Proceedings of Societies.

BATH AND BRISTOL BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

QUARTERLY MEETING.

A quarterly meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, was held at the York House, Bath, on September 30th, Farnham Flower, Esq., in the Chair.

There were present—Drs. W. Budd, Henry Fox, and Symonds; Messrs. Clark, Estlin, J. Godfrey, Hetling, Lancaster, Lowe, Mayor, Neeld, Prichard, and Smerdon, of Bristol; Drs. Booth, Davies, Edwards, Hodges, Lindoe, McDermott, Spry, and Tunstall; Messrs. Bally, Barnard, Bartrum, Brace, Cox, George, Hants, Hensley, Hunt, King, Norman, John Soden, Stone, and T. G. Stockwell, of Bath; Messrs. Crang, Timsbury; Colborne, Chippenham; C. Edwards, Batheaston; R. Godfrey, Yatton Keynall; Jennings, Laycock; Vicary, Warminster, &c.

MELANOSIS OF THE EYE-BALL.

Mr. Soden narrated and exhibited the case of a man aged 46, who about fourteen years ago, from his own statement, appeared to have suffered from inflammation of the iris and deeper tissues of the left eye, leaving the pupil fixed, irregular, and blocked up by lymph. These inflammatory attacks were several times renewed, the eye-ball being left disorganized, but not altered in size or shape.

In the years 1842, 1843, and 1844, he had very severe attacks of conjunctivitis, attended by considerable chemosis; under active local treatment the swollen state of the membrane was reduced, and there was left, what appeared to be a large choroid staphyloma, occupying the whole of the upper half of the globe. In July, 1844, on account of the continual irritation kept up by the prominence of the eye-ball, it was decided to evacuate its humors; on cutting into the blueish semi-transparent projection, it was found to arise not from the collection of fluid, but to consist of a soft blackish matter, evidently melanotic. On consultation it was decided at once to remove the whole organ, which was done effectually, without incising the outer canthus. The case progressed very favourably, there being no growth from the orbit for a considerable period. The upper eye-lid gradually became larger, without the occurrence of any hæmorrhage, till in the spring of 1847, it extended from an inch above the superciliary ridge down the whole length of the nose, across the face, to the temporal fossa. In June, after considerable constitutional disturbance, attended with erysipelatous inflammation of the whole left side of the face, four or five prominent spots appeared, especially near the inner canthus, and after a short time gave way without any hæmorrhage, forming sloughs the size of the middle finger, and from an inch to an inch and a half long; the cavities formed by these sloughs quickly filled up, leaving the remaining portion quieter and more easy than for months previously. The whole mass has been diminished more than one half, the eye-brow and temple have resumed their natural shape and direction, as well as their sensation. The mass now left is elastic, not very firm, dark in colour, with enlarged tortuous veins running beneath the skin; it occupies the outer two-thirds of the orbit, and projects slightly over the inferior border of the orbit.

Mr. Soden remarked that this case was a rare example of a disease usually so malignant exhibiting so marked a tendency to spontaneous cure, the portion of the skin where the sloughing took place being natural in appearance, and the cicatrices resulting therefrom not hard nor discoloured, but depressed, and presenting nothing abnormal.

Mr. Norman related the history, and exhibited the preparations, of a case of aneurism of the abdominal aorta, simulating diseased kidney, ending in rupture into the lumbar adipose tissue; and a case of extensive dilatation of the aorta, simulating aneurism, with ulceration of the lining membrane, in which there was also paralysis and softening of the brain.

MEDULLARY CARCINOMA.

Mr. James Godfrey detailed the particulars of a case of medullary carcinoma occurring in a young woman under his care in the Bristol General Hospital.

The young person was 23 years of age, and was admitted with a large tumour in the left hypochondrium, prominent and apparently intermuscular, manifesting by external and internal examination, no firm attachment, except to the false ribs, regular in form, with the exception of one slightly projecting cyst, irregular and imperfectly fluctuating to the feel. Although the tumour had existed for more than two years, her health had not been much interfered with, and until a fortnight before her admission she had been able to fulfil her laborious duties as general servant, although the tumour was equal in size to half an average melon. At that period she supposed she had strained herself, and the tumour became painful. After a few days of rest the tumour was punctured with a small exploring trocar, and three days afterwards, the small cyst was evacuated of its contents by a larger trocar; at the same time an opportunity was afforded of shewing the general contents of the tumour to be solid. Within a week she appeared to be suffering from cold, and in a couple of days, pleuro-pneumonia became developed on the left side generally, with very rough respiration and bronchial râle over the right side. Her general symptoms were characteristic of both weak action and power; the pleurisy in the left side became aggravated,

the right side pneumothoracic, and she died in little more than three weeks from the period of her admission.

The *post-mortem* inspection revealed extensive soft cancerous deposit in both lungs. On the side affected with pneumothorax, the contracted lung was covered with globular, pendulous, subpleural masses from the size of a pea to that of a large walnut; one in the body of the lung was of large size, and with some of those on the surface, clotted; their general colour was white and grey, except where tinted with blood. The masses of deposit on the opposite (pleuritic) side were smaller, and more of a miliary character; between the base of this lung and the diaphragm, but still subpleural, was a large semifluid pultaceous collection of cancerous deposit, from which the inflammation seemed to have arisen. The tumour proved intermuscular, between the inner, oblique, and transversalis muscles, and projected acutely inwards towards the colon, to which adhesion of the altered and softened transversalis muscle had taken place, and a communication would doubtlessly have soon been established with the interior of this bowel. Like the visceral deposit, that of the tumour was medullary cancer. A cast of the tumour, preparation of the lung, and a microscopic specimen were exhibited.

Dr. Edwards read a paper on the use of phosphate of ammonia in certain forms of rheumatism.

Mr. T. Barrett read a case of rigidity of the os uteri, treated by incision of the cervix.

BIRMINGHAM PATHOLOGICAL SOCIETY,

June 5th, 1847.

ALFRED BAKER, Esq., in the Chair.

SCROFULOUS KIDNEY.

Mr. Bindley exhibited a scrofulous kidney and a bladder, with thickening and softening of its mucous membrane. They were removed from a girl seven years of age, whose history is briefly as follows:—Three years ago she had measles, and has never since been well. Symptoms of chronic pulmonary disease began and progressed, till within three or four months of her death, when pain and difficulty in making water came on, and soon became exceedingly severe, and accompanied by distressing straining. She could not retain her urine, but was constantly wet, and with this had frequent diarrhœa. Opium, suppositories, and buchu tea, with potash, afforded much relief for a time. The urine contained blood, a large quantity of mucus, and some pus; was alkaline, and deposited prisms of triple phosphate. The pulmonic symptoms abated for a while, but in a short time returned, with hectic fever, sweating, and diarrhœa. The child died about a month ago.

On examining the body, vomicæ were found in the apices of both lungs; tubercles in various stages of softening; ulceration in the small intestines and cæcum; and a large quantity of tubercular deposit in one kidney, filling its pelvis and upper part of the ureter. The mucous membrane of the bladder was soft and thickened, but there was no ulceration.

STRICTURE OF THE ŒSOPHAGUS.

Mr. F. Elkington exhibited an œsophagus with a stricture, of a cancerous character, which would not admit the thin end of a common blow-pipe,—also two cancerous tumours in the substance of the liver, taken from a patient aged 51, and gave the following history of the case:—

William Unite, aged 51, had a severe attack of spasmodic pain in the stomach about two years ago, which was followed by jaundice. He recovered quickly from the attack, and remained as well as usual till the commencement of the present year, 1847. About the beginning of February he began to feel unwell, his appetite became bad, and he suffered from dyspeptic symptoms. He then had severe pain about the centre of, and opposite to, the last bone of the sternum; the pain continued for two or three days, and was accompanied by some difficulty in swallowing. He continued his work at a lathe till the end of April. At his work he had occasion frequently to press against his stomach. I visited him for the first time April 5th, he was then complaining of great weakness, indigestion, and difficulty in swallowing, but said he was quite free from pain. He had lost flesh very much; his pulse was weak, bowels costive, skin sallow and something of a leaden hue, tongue clean, and he had a slight dry cough. There was dulness on percussion in each clavicular region, and a feeble respiration at those points; elsewhere in the chest the sounds were normal. He was ordered to take an alterative pill at night, a draught of compound senna mixture every morning, and a quinine mixture three times a day. He continued this plan till the 14th. He was then complaining of heartburn, sickness, and pyrosis; the difficulty in swallowing had increased, and he could only take liquids. He took little else than milk. He was ordered to take tris-nitrate of bismuth thrice a day. He was relieved for a day or two, but on the 19th was not so well, complaining of an aggravation of all the symptoms, and some pain or uneasiness behind the sternum. Dr. Birt Davies saw him in consultation, and prescribed small doses of the arsenical solution and a blister to the sternum. For some days he thought himself better, and pursued the plan till May 1st. He was then worse, and had got tired of the medicine. The sickness being constant and most distressing, he was ordered to take a mixture, with prussic acid, every three or four hours, which afforded him some relief; but he gradually got worse, and died May 5th.

The body was examined thirty hours after death; it was very much emaciated. In the apex of the right lung were found tubercles in a softened state; in the apex of the left lung were also tubercles, and two small cavities. The œsophagus was contracted and very much thickened at its lower part; about three inches from its termination it was very nearly obliterated; it would scarcely admit the thin end of a common blow-pipe; there was a deposition of morbid matter into the coats of the tube, and into the cellular tissue surrounding it, of a cancerous character; above the diseased part the tube was very much dilated. There were two cancerous tumours in the substance of the liver, the largest being

as large as a pigeon's egg; there were also two enlarged glands at the head of the pancreas, which appeared to be affected with the same disease.

It is worthy of remark, that although there was such extensive disease in the œsophagus, the liver, and in the vicinity of the pancreas, he scarcely ever complained of pain. The prominent and most distressing symptoms were vomiting and difficulty of swallowing.

TUBERCLE OF THE BRAIN AND OF THE MEDIASTINUM.

Dr. Fletcher brought forward a specimen of tubercle of the brain, taken from the upper part of the right hemisphere, between the anterior and middle lobes; and also one of the anterior mediastinum, which had protruded itself so as to make a cavity for its lodgement in the superior lobe of the right lung.

The patient from whom these specimens were taken was a little boy, about nine years old, who had been the subject of hemeralopia, which had been gradually coming on for some time. About eight months since he was brought to Dr. Fletcher, when the parents stated that as soon as evening set in the boy seemed to lose all power of sight, when the light began to subside; although he could see tolerably well when his face was turned towards the light, he could not direct his steps in going across the room, with his back turned to the window, and artificial light did not produce the power of sight. Nothing else was complained of except that the child appeared heavy and dull. Four leeches to be applied behind the ears.

R. Hydrarg. Chloridi, gr. ij.; Pulv. Scammon, gr. x. M. Fiat pulv. tertia quaque mane sumend.

R. Magnes. Sulphatis, Magnes. Carbonatis, utrq. dr. ij.; Syrupi Simplicis, Mist Camph, utrq., oz. ij. M. Capiat cochl. medium bis indies.

These medicines were continued for about a fortnight and afforded great relief.

About the middle of last month he again came under Dr. Fletcher's care, suffering from the same affection. The same means were resorted to, but without the same good effect; he gradually got more dull and heavy, and the night vision became very much worse, indeed it amounted to total blindness, whilst in the day, even to the last, the vision remained little affected; the pupils were not more than usually dilated, and they were equally so, and also equally contractible. Convulsions came on on the evening of the 22nd of May; he died on the 23rd, and a *post-mortem* examination was made on the 24th, at seven a.m.

Head: The brain was a little more vascular than natural, and otherwise healthy, except that there was a tubercle, about the size of a small walnut, between the upper part of the anterior and middle lobes of the right hemisphere.—*Chest:* In the anterior mediastinum were several masses of tubercle; one large and elongated in its shape, pushed the right wall of the mediastinum before it, and pressed into the superior lobe of the right lung, so as to form a cavity in it large enough to admit the thumb as far as the root of the nail; this lobe of the lung was much congested, and did not crepitate upon pressure. The other contents of the thorax were healthy, as were also those of the abdominal cavity.

Dr. Fletcher said, that in the *post-mortem* examination, interesting as it was, there was nothing to explain the night blindness of the patient, all parts in connection with the visual apparatus were perfectly healthy.

PERFORATION OF THE STOMACH.

Dr. Fletcher then brought forward a specimen of perforation of the stomach, which had been given to him for exhibition to the Society, by Mr. Amphlett, who had kindly supplied the following particulars:—

"In the month of May last, I was summoned at seven o'clock in the morning, to visit Miss D., who had been taken ill during the night, with violent pain in the bowels, and being confined to my bed, I requested my friend, Mr. Clarkson, to see her, which he did about half past eight o'clock, and considered the case one of acute enteritis, for which he prescribed some medicine and ordered the abdomen to be covered with leeches. No relief, however, was afforded, and she expired, after suffering great agony, at four o'clock the same afternoon. I made a *post-mortem* examination, but was only permitted to examine the abdomen. I found most extensive peritonitis with perforation of the stomach. Miss D. was quite well the night before she died, and had partaken of a hearty supper. For two years previous to her death, I had attended her occasionally for pain in the stomach, but without any marked or violent symptons; for the last three months, however, she had not required any medical aid."

Foreign Department.

MEMOIR ON THE RESTORATION OF THE ALÆ NASI.

By M. BONNET.

(Translated for the Provincial Medical and Surgical Journal.)

The alæ nasi are composed of skin, mucous membrane, and intermediate fibro-cartilage; in order therefore, to restore a deficiency in these parts, the portion of flesh which is transplanted, should consist of the three tissues mentioned.

None of the methods at present in use, fulfil these conditions. If the portion to be substituted be taken from the skin of the cheek, the new ala nasi is composed solely of integument, and is, moreover, extremely prone to gangrene, leaving an indelible cicatrix on the spot whence it has been taken. These disadvantages are all done away with if the surgeon makes use of the flap taken from the entire thickness of the upper lip; for in the first place, he restores the lost part by a portion of similar construction, the skin of the nose is replaced by that of a neighbouring part, the mucous membrane of the interior of the nose is represented by that of the interior of the lip, and the muscular structure of the organ becomes a substitute for the fibro-cartilage of the nostril; secondly, the flap of skin which is twisted round through the fourth part of a circle, being supplied by numerous vessels, is but little liable to sphacelate, but on the contrary unites readily; and thirdly, the wound on

the lip gives rise only to a linear cicatrix, as it is sure to heal by the first intention, if the edges are properly adjusted. The success of this method is well exhibited in the subjoined case :—

COMPLETE DESTRUCTION OF THE LEFT ALA NASI: RESTORATION BY MEANS OF A PORTION OF THE UPPER LIP.

Claude Poyet, aged 57, had the left ala nasi entirely destroyed by lupus. The ulcer had been cured for upwards of six months, leaving a large excavation, which disclosed the interior of the nares. The deformity thus induced was so disgusting, that the poor man, who was a "commissionaire," was reduced to destitution for want of employment, and on this account urgently sought some means of remedying his repulsive aspect. It occurred to me, that this was a favourable opportunity for testing the above operation, and I accordingly performed it as follows :—

After denuding the cicatrized edges of the deformed nostril, I cut through the entire thickness of the upper lip on the same side, by two incisions. The first of these commenced at the posterior angle of the ulceration, and inclined slightly towards the centre of the lip, the other beginning half an inch farther back, ended at the commissure of the mouth. The space included between the incisions was exactly equal to the length of the anterior border of the ulcer. The flap was then separated from the superior maxilla for about a third of an inch in height, and the two edges of the divided lip were brought together by three pins; the flap itself being twisted round its anterior edge, was placed in apposition with the posterior border of the ulcer, its inferior edge to the anterior border, and its posterior edge was left to form the free edge of the nostril. The parts were kept in apposition by five sutures.

The advantages of this mode of operating were immediately visible. The cicatrix on the lip was perfectly linear, as in the operation for hare-lip, the flap filled up the gap in the nostril with the greatest exactitude, and the projection formed by the twist given it, in some measure resembled the natural state of the parts. The case was seen by several surgeons, and its results were considered as in the highest degree satisfactory. The only drawback was the necessity of shaving the new nostril, upon which the beard grew as usual.

In order to exhibit the advantages of the above method of operating, I will now briefly pass in review the different processes for restoring the alæ nasi, which have generally been adopted.

When the integument covering the bones of the nose is not implicated, and the destruction is entirely confined to the cartilage of the nostril, it is evident that the restoration must be made from the neighbouring integuments, and not from the forehead. In doing this, two methods may be followed,—that by traction or the French method; or the Indian, or the method by torsion. The French plan may be adopted under two modifications. The flap of integument which is detached on three sides, may be left adherent by its outer or by its upper border. By the first method, if the loss of substance has been as great as in the present instance, it is doubtful whether the flap could be drawn sufficiently forwards to enable its internal border to be neatly adapted to the skin which remains upon the dorsum of the nose; and even if by minute dissection this adaptation be effected, the appearance will be anything but graceful, as the side of the nose thus restored, will have a straight direction from the cheek to the bridge of the organ, instead of assuming the natural sinuosities of that feature.

If the flap from the cheek be left adherent at its superior border, as is advised by M. Serres, the operation will doubtless be more easily accomplished; but it is to be feared that the flap, which is supplied by capillary vessels only, will be inclined to sphacelate; and in addition to this, the wound, which is necessarily made to obtain the flap, will offer a most unsightly cicatrix.

M. Labat proposes to restore the ala nasi by a flap taken from the cheek, and twisted upon itself; a proceeding which we do not consider as offering any prospect of success. If the muscles of the face are included in the flap, the movements of the face are in part destroyed, and the facial artery and vein are wounded; and on the other hand, if the skin alone is used, there is the fear that it will sphacelate, at least at its borders, and thus destroy the form of the nostril.

In reference to the plan which I have above advocated, there are but two trifling objections—viz., the growth of hair upon the nostril, and the great thickness of the flap. The latter is more apparent than real, and the former inconvenience is readily obviated by the razor or the use of depilatories.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE.

SCURVY.

M. Scoutteten laid before the Academy a brief and imperfect sketch of an epidemic of scurvy, which has recently appeared in the garrison of Givet. The epidemic commenced on the 20th of May, and presented itself under two forms,—the one attended with febrile disturbance, the other not. It was preceded by an epidemic of typhus, and appeared to originate in the same causes. M. Scoutteten, on his arrival, found the hospital to be under the worst possible conditions, as to hygiene; and the removal of the patients to a more elevated and drier situation, appeared of itself to produce great amelioration. This atmospheric condition is considered to have been mainly instrumental in the production of the disease, but the causes seem to have been so imperfectly investigated, that the communication is without value. It forms a striking contrast in this respect to the elaborate essays on the same subject, which have recently appeared in the *Provincial Journal*, and in the *Edinburgh Monthly and Quarterly Journals*.

TUBERCULIZATION OF THE BRONCHIAL GLANDS.

M. Marechal, (de Calvi,) read a paper on this subject, of which the following deductions give a sufficiently precise idea :—

1. Tuberculization of the bronchial glands is not confined to infancy, as has been thought, but may likewise occur in the adult.

2. The disease may be a cause of sudden death by compression of the trachea and bronchial tubes.

3. Independently of this sudden destruction, death may be produced by gradual compression of the same parts.

4. The serous infiltrations which are observed in this complaint, in both children and adults, are caused by compression of the nervous trunks.

SPARKLING SYNCHISIS.

This ophthalmic affection has again occupied the attention of members. M. Bruisson has addressed a letter to the Academy, in which he endeavours to shew, that the moving and glittering particles which characterize the disease, are not portions of the hyaloid membrane, but are fragments of a crystalline nature, floating in the vitreous humour; and as he has ascertainced that this humour contains fatty matters in a state of solution, he thinks it probable that the cholesterine becomes separated in the crystalline form, and gives rise to the sparkling appearance.

M. Alphonse Robert presented a patient, the subject of the above affection, a woman of 60 years of age. For the space of a year she had been gradually, and without apparent cause, losing her sight. The pupil was regular, slightly dilated, but the iris had an antero-posterior oscillation. The lens was displaced, and was fixed at the inferior part of the vitreous humour. But the most remarkable appearance was that of a great number of shining spangles floating in the vitreous humour, some of which were constantly changing their place, others remaining more fixed. M. Robert considers also that they are crystals of cholesterine, either attached to the fragments of the hyaloid membrane, or floating free in the vitreous humour.

METHOD OF DISGUISING THE NAUSEOUS TASTE OF EPSOM SALTS.

M. Soubeiran made known a new method of depriving the sulphate of magnesia of its bitterness, which consists in the addition of tannin, in minute quantity.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES.

The communications to this academy since our last Report have been numerous, and many of them of real value. The principal were:—

1. On the quantity of fatty matters contained in the healthy lungs.

2. On ossification of the cartilages of the larynx.

3. A case of congenital opacity of the cornea, coinciding with an arrest of development of the iris.

4. On the action of sulphate of quinine on the genito-urinary organs.

5. On the disintegration of vesical calculi, by galvanic and chemical agency combined.

6. On poisoning by vegetable productions, and particularly opium and its preparations.

The fourth and fifth only of these are of immediate interest.

ON THE ACTION OF THE SULPHATE OF QUININE ON THE GENITAL ORGANS.

M. Duchassaing records five cases in which quinine, in ten to fifteen grain doses, has been followed by strangury and hæmaturia. He admits that this action is far from general, and is confined to young and cachectic subjects. Bark has no such effect. He has also stated that in doses of ten to twenty grains it is powerfully emenagogue.

ON THE DISINTEGRATION OF VESICAL CALCULI, &c.

M. C. Phillips addressed a memoir on the disintegration of stone in the bladder, by the combined effects of a galvanic and chemical current. His conclusions are as follows:—1. The disintegration is effected by the united action of a galvanic and a chemical current. 2. The galvanic current alone is insufficient. 3. By the chemical current we not only facilitate the solution of the stone, but we are able to wash out the detached fragments. 4. Under the influence of the two currents, prolonged for the space of thirty or forty minutes, the outer layers of the hardest calculi become friable, and are subsequently easily crushed. 5. The oxalate of lime calculi have, up to the present time, resisted the galvano-chemical currents.

For practical convenience, the author divides vesical calculi into those which are affected by acids, and those which are dissolved by alkalies. The alkaline current is made by the solution of seven grains and a half of potash, in eight ounces of distilled water; the acid is composed of twenty drops of sulphuric acid, to four ounces of distilled water: both may be used with impunity as regards the coats of the bladder. The description of the instrument is given, but is unintelligible without a plate.

NOTES FROM A PRACTITIONER'S DAY BOOK.

(Continued from page 528.)

PALSY OF THE IRIS CURABLE BY THE LOCAL USE OF STRYCHNIA.

A woodman was cutting timber with an axe, when a flying chip struck him on the upper eyelid, where a small lacerated wound was inflicted. I saw him soon after the accident. The globe presented no external marks of injury, but the pupil was much dilated, and there was a small quantity of blood effused into the anterior chamber, whilst the vision was so imperfect that he could not distinguish the number of fingers I presented before the eye. I prescribed calomel and opium, so as rapidly to induce mercurial action, and directed that if any pain should come on towards the evening, a dozen leeches should be applied to the temple. This was found necessary, and done.

Slight tenderness of the gums was kept up for about three weeks, at the end of which time, these were the symptoms and appearances:—The pupil was dilated and immoveable, the iris not contracting in the slightest degree from sympathy with the other, or on the admission of a strong light to the retina, but floating like a loose veil in the aqueous humour, and tremulous with every quick motion of the globe. Vision was now so far restored that he could see his fingers distinctly, and even

distinguish the cross-bars of a window at some distance. The eye and head, ever since the day of the injury, had remained quite free from pain. I now prescribed five grains of Plummer's pill every night, and omitted the calomel and opium. The power of vision gradually increased, until after a few days it was impeded merely by the appearance of a light net-work before the eye. As the iris still continued paralysed and tremulous, I gave my patient an aqueous solution of strychnia, two grains to the fluid-ounce, with two minims of dilute sulphuric acid. Of this I directed him to introduce two drops into the eye every night and morning, continuing the compound calomel pill as before. At the end of ten days I was gratified to find that the iris was no longer tremulous, and had regained the power of contracting slightly on the stimulus of light. The power gradually increased, and, at the last visit which my patient made, the affected pupil was but little larger than the other, the iris contracted and expanded very readily, and there was but little impairment of vision.

DELIRIUM TREMENS.

When habits of intemperance have produced a predisposition to delirium tremens, slight causes which agitate the mind will bring on an attack. An Irishman, of the Roman Catholic persuasion, who had been living upon suction for the previous fortnight, was much annoyed by remembering that it was Friday, after he had partaken of a pig's foot for his supper. His religion enjoins this day to be kept as a fast. The consequence of the mental irritation was an attack, during the night, of delirium tremens, which eventually terminated his life.

A tailor, a devoted worshipper of the Bacchanalian Deity, and an occasional sufferer from delirium tremens, fell into pecuniary difficulties. He sallied out one morning in his usual health to procure the money to meet a bill, which on that day became due. His hopes rested principally on a customer who was considerably in his debt, but he was put off with a request to call again. The only thread which sustained him was now broken. He had hardly walked a hundred yards from the house, when "he began to feel so light, that he thought he could have jumped over the moon, and he offered to fight any of the passengers." Being called to him a few minutes afterwards, I found him in a state of alternating exhilaration and despondency: this ended in delirium tremens.

A very intemperate, young, brewer's labourer suffered from the ordinary form of autumnal diarrhœa. He was convalescent from this in two days, but the third night was spent in a state of great restlessness. The next afternoon symptoms of delirium tremens showed themselves, and carried him off in about sixty hours.

I was summoned about five o'clock one afternoon to a woman whom I found under these circumstances:—She was lying on a sofa, with a man at her side holding her down by the wrists. On my entering the room she immediately addressed me as her landlord, who she believed had called for her rent, which was due, but she was unable to pay. One moment she imagined she was in a prison, at another, in a madhouse; and she mistook her sons for turnkeys and keepers. On my humouring her fancies rather than contradicting them, or reasoning with her, she immediately made me her friend and confidant, and, entering into an account of her imaginary grievances, desired my aid in a plan for her escape. Her manner was quick, and her utterance earnest and rapid, but there was no tremor of the muscular system. Her pulse was hurried, but soft; her tongue was white, but moist. She had previously made no complaint, but on my questioning her, said she had pain all over. When I asked her where in particular, she pointed to her elbow, which had just been knocked in her struggles. She was a widow of forty, in moderately easy circumstances, and her countenance bore plain evidence of her partiality for the bottle. Her son told me he had frequently seen his mother the worse for liquor, more particularly so of late, and that she had suffered from an attack similar to this a few years before, but it had subsided on her taking some medicine which induced sleep. Her present attack had commenced about midday, she having slept soundly the night before and felt quite well all the morning. I could discover no more immediate exciting cause. Her rent of which she had spoken was due, but her landlord had made no demand. The only particular event which had occurred was a slight dispute with one of her sons about a shirt, which he said had not been properly aired.

I prescribed forty minims of laudanum, and forty of the tincture of hyoscyamus, to be taken immediately, and repeated every second hour, until sleep was induced. I saw her again about seven, soon after she had taken her second dose. She was now more tranquil, though still labouring under the same delusions, occasionally fancying that she saw absent people, and recognizing nothing about her, though sitting in her own room, and surrounded by her sons. At nine, after a third dose had been given, I found her quite herself again, though somewhat agitated at discovering that she had been so ill; she had, however, no recollection of what had passed. The opiate had made her rather drowsy, and she had even dozed off once for about ten minutes. I directed her to take another draught, and then go to bed. She slept well through the night, and in the morning I found her merely suffering from slight headache and nausea, probably the effects of the opium, as they were readily relieved by a purgative.

Modes of Dying.—A young man suffered from delirium tremens. After fifty hours violent raving, during which he had taken large and repeated doses of laudanum, he sank into the calmest sleep possible. I saw him in this state; the breathing was light, and without any stertor; the pulse had lost its rapidity, but was quite regular. Gently raising the lid I saw the pupil much dilated. I left him. He continued in this state for about five hours, when his brother, who had been constantly watching by his side, looked into his face and found him dead.

In another case of the same disease, the patient, who was a drayman, remained in a state of the most violent and active delirium, incessantly struggling with his attendants, and endeavouring to get out of bed. Upon this condition opium had no influence. The vital powers gradually failed, but not so the cerebral irritation. The delirium continued to the last. Whilst dying, asphyxiated with

accumulated mucus in the trachea and bronchial tubes, he acted as though he were driving his team, and the death rattle was mingled with terms of encouragement to his horses.

ANODYNE EFFECTS OF TOBACCO.

A strong young man was suffering from an attack of erysipelas of the head; the delirium accompanying it was extreme, and the cerebral irritation had already deprived him of all sleep for two nights. The case was now getting desperate, and though the cerebral excitement continued as bad as ever, the vital powers were failing, and I feared that another few hours' want of sleep would be fatal. He happened at this time whilst I was in the room to ask for a pipe, and finding that he was in the habit of smoking a great deal, I requested his friends to give him one. He seemed to enjoy it exceedingly, and sat up in bed, taking a few whiffs between his delirious ravings; the exertion, however, was too great for him, and before he had consumed more than two-thirds of the tobacco, he was obliged to put it aside; but he was now much calmer, and lay down more quietly than I had seen him before. The composing effect continued to increase, and within twenty minutes he was sound asleep. From this time the case progressed favourably.

C. ARNECAPLE.

General Retrospect.

PATHOLOGY.

MICROSCOPIC EXAMINATION OF THE CONTENTS OF VESICLES, PUSTULES, &c.

By Dr. Seitz.

The author first examined the vesicles of miliary fever. The fluid contained in them is at first clear, and remains so for a certain period. Under the microscope small nuclei are discovered, together with distinct cells, somewhat smaller than the ordinary pus-globule. These cells contain three or more nuclei, which are readily rendered distinct by the aid of acetic acid. After a certain time the fluid becomes less transparent and fluid; it is then seen to contain the same cells, but in larger quantity, and of a form somewhat altered by the compression to which they have been subjected. The thick yellow liquid which is found in the vesicles of older date, and which are on the point of being dried up, is almost entirely composed of these cells. The sudamina which occasionally appear during the course of rheumatism, in typhus fever, and some other affections, contain only an amorphous granular matter.

In the vesicles of chicken-pox, the cells are similar to those of miliaria, but are larger, being of a size superior to that of the pus-globule. The red points of measles are seen under the microscope to be composed of small clots of blood, but do not exhibit any traces of plastic lymph. The vaccine pustule contains large cells, which closely resemble the blood-globules, and which enclose one or more (rarely two,) nuclei.—*Heller's Archiv., Heft* 5 and 6, 1845.

SURGERY.

PARTIAL CLOSURE OF THE JAWS FROM RIGID CONTRACTION OF THE MASSETER MUSCLE.

Mr. Bulley, of Reading, relates two cases, each following a blow, in which one masseter muscle became so rigid as to prevent the mouth being opened, and consequently causing great prostration from want of due nutrition. The first case was treated by mechanical extension alone, the other with the addition of electro-galvanism. This latter agent appeared to have the effect of relieving the pain produced by the extension. The instruments used for extension consisted of two flat blades, which could be separated by means of a screw. Mr. Bulley was aware, that in similar cases, subcutaneous division of the contracted muscle had been performed by Mr. Fergusson, but was deterred from having recourse to it by the idea of its difficulty.—*Medical Times*, Sept. 4th.

[In this fear we do not partake, for with ordinary precaution respecting the facial artery and the parotid duct, we do not see that any great delicacy of manipulation is necessary, or that any risk of injury would be encountered. The speedy relief which would be afforded by even a partial division of the muscle, would, we think, amply compensate for any danger which might offer itself in the preference of this operation to the tedious process of dilatation.]

TREATMENT OF VARICES BY ELECTRO-PUNCTURE.

Having met with decided success in the treatment of small aneurisms by electro-puncture, it occurred to MM. Bertani and Milani to adopt the same treatment for varicose veins. The results of their experiments are not altogether satisfactory, but are interesting as far as they go. The method of applying the remedy is as follows:—The limb is carefully bandaged from the toes to a point just below the knee, and also from the groin to within six fingers' breadth of the other bandage. The patient standing, the surgeon then pierces the loops of the venous trunk, just above the lower bandage, with a platinum needle, the point of which is left free in one of the loops. A second, third, and fourth needle are similarly disposed in other venous loops, two being on the outside of the leg. To the needles which are fixed on the inside, the zinc pole of the battery is attached; to the other, the copper pole. A current is then continued for ten minutes through two needles, the inferior of the inside, and the superior of the outside ones, after which it is changed for the other two needles. During the operation very little pain is experienced.

The first case reported is imperfect, as the patient refused a second operation, but it was distinctly ascertained that coagula were formed from a single application of the needles. A second and third case were completely successful, one in ten sittings, the other in two.—*Journ. des Connaissances Med. Chirurg.*

ABSCESS OF THE ILIAC FOSSA OPENING INTO THE BLADDER, AND SUBSEQUENTLY POINTING IN THE BACK.

Dr. Battersby reports the following interesting case:—Nicholas Smith, aged six months, laboured

under a complaint, the nature of which for some weeks remained obscure. His chief symptoms were fever, restlessness, and an inability or disinclination to place his legs under him. After a short period, soft elastic tumefaction of the integuments of the right side of the hypogastric region was observed; and in addition to this, a very hard, elongated, and fixed and painful tumour was felt, deep under Poupart's ligament. The right leg was swollen and hard, but not œdematous, and the thigh was immoveably semi-flexed upon the pelvis. No cause could be assigned for his illness, excepting a fall from the cradle.

The tumour on the pelvis continned to enlarge for about the space of a month, when there was discharged with the urine a cupful of pus, which was followed by great relief, and evident diminution of the tumour. In about another month the discharge of pus with the urine had nearly ceased, and the pelvic tumour was again beginning to enlarge. There was now also considerable tumefaction about the right buttock, between the margin of the ilium and spine of the sacrum, having a very indistinct sense of fluctuation; the skin was not discoloured; the thigh remained semi-flexed as before. The second tumour continued to enlarge, and was eventually opened, giving issue to much thick pus. From this time the child began to improve, and eventually got quite well.—*Dublin Quarterly Journal*, May, 1847.

[The case is especially remarkable for the early age at which the iliac abscess declared itself, none being previously on record before the age of five years.]

FRACTURE OF THE CRANIUM IN CHILDREN.

Dr. Hamilton, (U.S.,) endeavours to supply a deficiency in surgical literature,—viz., the rules by which we should be guided in fractures of the skull in children. He calls attention to three facts:—1. That until the second or third year and sometimes later, the fontanelles are open. 2. That during the same period very little hard matter has been deposited in the cranial bones, they are soft, flexible, and resilient. 3. The bones are almost without diploe until the fifth year, and the dura mater is firmly adherent. From these facts he infers the correctness of the following line of treatment:—

1. That if a fracture with depression occurs in a child, and no signs of compression follow, an operation is unjustifiable.

2. That if symptoms of compression do actually exist, and there is no external wound which will at once admit the elevator to the fracture, unless the coma has continued several hours, no operation, not even incision of the scalp, is justifiable. And if after the lapse of several hours the coma continues, but gradually diminishes, it is still right to delay the operation.

3. If, in connection with the coma, there exists also a considerable external wound, so that instruments can at once be applied to the skull, and the elevator has been used without effect, still the propriety of resorting to the saw or trephine may be doubtful; for in children, the saw or trephine must traverse the entire thickness of the bone, as its structure is too pliable to be broken up by the elevator, as in the adult; and it is therefore next to impossible to avoid wounding the closely-adherent dura mater.

Taking these difficulties into consideration in connection with the great resiliency of the cranial bones of children, and the great consequent probability of their recovering themselves, after depression, the author comes to the conclusion that in the young subject an operation can seldom be necessary or proper. He supports his opinion by the narrative of six cases.—*Buffalo Med. Journ.*, in *American Journ. of Med. Science*, July.

NEW SPLINT FOR FRACTURES OF THE HUMERUS.

By Robert Foulis Esq., Edinburgh.

In the treatment of fractures, it is a general principle that the mechanical support applied, of whatever kind it may be, should extend beyond the two extremities of the injured bone, in order to insure perfect immobility of the limb.

Now, in treating fractures of the humerus, this rule does not appear to have been hitherto attended to; for the splints in present use, although they are made to embrace the elbow-joint firmly, inferiorly and superiorly, do not extend farther than the neck of the humerus; thus the combined weight of the arm and splint tends to withdraw the lower portion of the fracture from the upper. True, the arm is supported by a sling, which the patient is strictly enjoined to wear, but this support is necessarily precarious. In the first place, the patient is often tempted to withdraw his arm from it; and secondly, however careful he may be, this is very apt to happen during sleep; hence the surgeon is frequently called upon to treat an un-united fracture of the humerus. Now, to lessen the risk of this evil, and to assist in its removal when it unfortunately occurs, the improved splint has been constructed.

Instead of terminating below the shoulder, the outer half of the splint is extended *over* the shoulder, where a strap is attached, and passed round the body below the opposite axilla. In cases of simple fracture, this will be quite sufficient to keep the arm steady, but in cases of un-united fracture, an additional strap is added, which, passing below the elbow and over the shoulder, can be drawn by means of a buckle to any required degree of tightness. In this way the fractured ends of the bone can be brought into close contact. A simpler form of this splint may be found useful in cases of dislocations of the head of the humerus, or of the scapular end of the clavicle, and also in fractures of the neck of the humerus, and of the acromion process of the scapula. In these, only one splint will be required, and instead of being cut as a right angle, so as to fit the exterior of the arm, it may be made straight and passed round the posterior of the arm; this, as the former, has a strap attached to the end of it, which is also passed round below the opposite axilla. It is unnecessary that it should be made of so firm texture as the former; some light substance, such as Bristol board, rendered firm with cloth pasted on both sides, will suffice; the strap also may be very light; perhaps a single fold of a bandage attached to the end of the splint, and passed round under the opposite axilla, will

be quite sufficient. I think a light splint of this kind, for dislocations, would be felt of very little inconvenience by the patient, and would afford very sufficient security against secondary dislocation. Of course, in this case a sling or bandage is essentially necessary, for the splint being straight, and passing around the posterior part of the arm, does not prevent its being stretched out as the first form of the splint does.—*Lancet*, August 28th.

CONGENITAL PHIMOSIS, WITH FORMATION OF CALCULI UNDER THE PREPUCE.

The following case occurred to Mr. Morris, of Spalding:—Robert Franks, aged eighteen years, a fine athletic youth, was admitted into the Union Infirmary, April 9, 1847. He stated that he was much troubled with gravel, and that he had been attended by an apothecary, but "his medicine did him no good." He saw him only two days before his admission, and gave him a bottle of medicine; he states that he has come into the Union Infirmary to be cured of his complaint. Upon examining the penis as he stood up, it presented a most singular appearance: the head of it was the size of a large orange, and hung down between his thighs; indeed, the weight was such as to elongate the penis considerably; the veins of the prepuce were much enlarged. Upon grasping the enlarged prepuce, and rotating it about in the hand, a distinct grating could be felt; indeed, it was exactly like handling a bag of marbles; the orifice of the prepuce was so small that I had great difficulty in passing the end of a probe through it. He states that when he passes water the prepuce first fills, and swells out; he then grasps it with his hand, and forces the urine out through the contracted orifice; he did this in my presence. He has never been able to have sexual intercourse; indeed, when an erection takes place, it must present a very formidable appearance. Having stated to him the nature of his complaint, and the operation necessary for its cure, he begged I would at once relieve him, as he wished "to be like other men." I, therefore, without further ceremony, slit up the prepuce by means of a director and bistoury, and turned out from beneath the foreskin 118 calculi, varying from the size of a millet-seed to that of a nut; the glans penis was remarkably small and shrunken. Having washed the parts well out, I ordered warm-water dressing. The youth went on afterwards very well, and on the 26th of April was discharged cured. The calculi were white and polished, with an uneven service, and, when divided, presented a laminated appearance, and gave out a strong ammoniacal odour: they appeared to be composed of the ammoniacal phosphate of magnesia.—*Medical Times.*

COMPARISON OF VINOUS AND IODINE INJECTIONS FOR THE CURE OF HYDROCELE.

Considerable discussion having recently taken place on the Continent as to the respective merits of vinous and iodine injections in hydrocele, M. Bouisson took the opportunity afforded him by a patient affected with double hydrocele, of testing the two forms of injection. Accordingly, he punctured first the right side of the scrotum, and having completely evacuated the contents, he injected the red wine of the country, warmed to 98° Fahrenheit. This occasioned considerable, but by no means insupportable, pain. Immediately afterwards he punctured and evacuated the right hydrocele, and into this he threw an injection, consisting of one part tincture of iodine, and three parts distilled water, without giving rise to the slightest pain.

The hydrocele into which the wine had been injected became considerably inflamed; the other side offered a striking contrast, which became more and more evident as the inflammation of the other increased. On the tenth day, the left (the iodine injection,) was completely cured without engorgement of the testicle or epididymis. On the right side the scrotum was still tumefied, the testicle was swelled and painful.—*Gazette Med.*, from *Journ. des Connaiss. Médicales.*

[There can be no doubt, that as far as this example goes, the superior advantage of iodine injections, both as to rapidity of cure and painlessness, is strongly marked; but it still remains to be proved, whether the side on which there was most inflammation may not be the most radically cured. It must also be remembered, that M. Fleury has performed precisely similar operations for double hydrocele, and with diametrically opposite results.]

MIDWIFERY.

ON THE USE OF AUSCULTATION IN LABOUR.

Dr. M'Clintock terminates an interesting paper on this subject by the subjoined conclusions:—1. When the fœtus is alive, the sounds of its heart may be always detected at some period of the labour. 2. The precise region of the abdomen in which the fœtal heart is heard affords auxiliary evidence of the position of the child *in utero*, but can never be relied on alone for determining this point, or supersede the necessity for vaginal examination. 3. In presentation of the lower extremities, whether it be breech, foot, or knee, the fœtal heart is usually heard most distinctly in the vicinity of the umbilicus of the mother. 4. Conclusive auricular evidence of the existence of twins *in utero* is only to be drawn from the inequality of the number of the beats of the new fœtal hearts, and not merely from any difference as to their respective positions. 5. If, in the course of a tedious or difficult labour, the fœtal cardiac sounds, from having been distinct and clear, gradually become feeble and obscure, and ultimately inaudible, even with every precaution against deception, their absence is positive evidence of the child's death; but without the previous successive examinations this conclusion would be destitute of any positive character. 6. In cases where ergot of rye has been given to hasten delivery, auscultation is the only certain way of discovering when the medicine is beginning to exert an injurious influence on the child. 7. In cases simulating rupture of the uterus, the persistence of the fœtal heart's sounds is a strong proof against the occurrence of the accident, and the more advanced the period at which they are audible after the setting in of bad symptons, the more conclusive is the evidence that rupture has not taken place; whilst the sudden cessation of the fœtal pulsations, where they

had been distinctly audible a short time previously, would corroborate strongly other existing symptoms of laceration of the uterus. 8. After an attack of puerperal convulsions in the seventh or eighth month of pregnancy, when labour has not immediately supervened, if the stethoscope shows that the child is alive, there is hope that gestation will go on undisturbed; but, if the child be dead, its expulsion will take place most probably in ten or fourteen days from the date of the convulsive attack. 9. No certain conclusion regarding the state of the fœtus can be drawn from the placental soufflet. 10. In cases of flooding before delivery, the placental bruit may point out the part of the uterus to which the after-birth is attached, and thereby show whether the hæmorrhage be accidental or unavoidable. 11. Auscultation of the heart in stillborn children more accurately acquaints us with the state of the child's vital powers, than any other source of information, and is, therefore, well deserving of employment in all such cases.—*Dublin Quarterly Journal*, May,

POOR-LAW MEDICAL OFFICERS: REQUISITION FOR A PUBLIC MEETING.

To the Medical Officers of Poor-Law Unions.

We, the undersigned, being persons interested in the amelioration of the present system of Poor-Law medical relief, hereby convene a general meeting of Poor-Law surgeons, and others of the medical profession, to be held on Wednesday, the 27th October, instant, at three o'clock, p.m., at the Hanover Square Rooms, which have been handsomely placed at the service of the intended meeting by the Council of the National Institute of Medicine.

The undersigned also strongly recommend special meetings of Poor-Law surgeons, in their several districts and Unions for the purpose, previously to the general meeting, of collecting data, to be submitted to the meeting, and appointing delegates to attend it.

Poor-Law medical officers, to whom it may be convenient, if not appointed as delegates, are also requested to give the benefit of their attendance at the meeting.

James Heygate, M.D., F.R.S., President of the Provincial Medical and Surgical Association.
Thomas Hodgkin, M.D.
R. S. Hutchinson, M.D., Nottingham.
Francis Sibson, Nottingham.
William Cantrell, Wirksworth.
Richard T. Tasker, Melbourne.
Booth Eddison, Nottingham.
Augustus Darley, Nottingham.
Thomas Martin, Reigate.
[Appointed with other gentlemen at the Derby meeting, as a deputation to wait on the Minister.]
William Sewell, Radford.
Joseph Thompson, Nottingham.
Henry Taylor, Nottingham.
Thomas Wilson, Nottingham.
Marshall Hall Higginbottom, Nottingham.
Edward Daniell, Newport Pagnell.
Alfred Ebsworth, Bulwell.
Peter Martin, Reigate.
——— Hardwicke.
Charles M. Thompson, Westerham.
Edward Boulger, Bletchingley.

REMUNERATION OF MEDICAL OFFICERS OF UNIONS.

BASFORD UNION.

At a Meeting of the Poor-Law Medical Officers of the Basford Union, held at the Flying Horse Hotel, Nottingham, October 2nd, Mr. Orton, of Beeston, in the Chair, the following resolutions were passed unanimously:—

Proposed by Mr. Longstaff, of Ilkeston, and seconded by Mr. Fowler, of Calverton,—

"That this Meeting, representing the feelings of the Medical Officers of the Basford Poor-Law Union, deprecates the present inadequate Salaries of the Medical Officers, sanctioned by the Poor-Law Commissioners."

Proposed by Mr. Ebsworth, of Bulwell, and seconded by Mr. Graham, of Basford:

"That this Meeting is of opinion that a Commission (a moiety consisting of medical men, acquainted with Poor-law Union Practice,) should be issued by Government, to enquire into the subject of the duties and remuneration of Medical Officers."

Proposed by Mr. Norman, of Ilkeston, and seconded by Mr. Longstaff,—

"That, on careful investigation, it appears to us, that in the Basford Union the Medical Salaries are far inferior to those in most other unions, being scarcely equal in a single instance to the actual cost of drugs and horse expenses, and therefore preclude the possibility of the Medical Officers doing justice to themselves and the poor also."

Proposed by Mr. Fowler, seconded by Mr. Ebsworth,—

"That copies of the Returns furnished to this Meeting by the several Medical Officers be forwarded to the Poor-Law Commissioners and the Board of Guardians, with the view of inducing them, at the earliest possible period, to remove the grievances under which the Medical Officers of the Basford Union, are now suffering."

Proposed by Mr. Longstaff, seconded by Mr. Graham,—

"That this Meeting is of opinion that the present fees allowed for Vaccination in the Basford Union are so low as to render the Vaccination Extension Act almost a nullity, and that no fee less than one shilling and sixpence will cause the Act to be carried out in the spirit in which the Legislature intended."

Proposed by Mr. Longstaff, seconded by Mr. Ebsworth,—

"That this Meeting condemns the exclusion of Burns, Scalds, and other long protracted and dangerous Surgical Cases from article 177 of the present Poor-Law Regulations; and they are of opinion that the article 181, should have been more defined, and made imperative."

Proposed by Mr. Graham, and seconded by Mr. Norman,—

"That these resolutions be printed, and a copy forwarded to the Poor-Law Commissioners, the Basford Board of Guardians, the Medical Periodicals, and the local Journals."

INFLAMMATORY DISEASE OF THE CERVIX UTERI A CAUSE OF ABORTION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I have just perused, in a late number of your Journal, a letter from Mr. Whitehead, of Manchester, which I trust you will allow me briefly to notice. Mr. Whitehead's letter is elicited by some remarks made by me, respecting his recent work on the "Causes of Abortion, &c.," in an article published in the *Lancet* about two months ago, (July 24th,)—remarks which I am sorry to say he has misinterpreted.

Mr. Whitehead appears to think that I accuse him of plagiarism—an idea which he would not certainly retain were he to carefully re-peruse the communication to which he alludes. So far from accusing him of copying my writings on this subject, I stated, in order to prevent, as I hoped, the probability of such an impression, that he was *evidently* "ignorant of my later publications on this subject, in 1846." Having thus, by courteously and candidly presuming Mr. Whitehead's ignorance of my later writings, screened myself from the intention of imputing plagiarism to him, I considered that I was perfectly warranted in asserting what is an absolute matter of fact,—viz., that I had more than "incidentally" (as stated in his preface,) alluded to the subject of uterine inflammation in the pregnant female, in my work "On Uterine Inflammation;" and that in a paper read before the British Association in September, 1846, and shortly afterwards published, with considerable additions, in the *Lancet*, I had entered at considerable length into the question, thus forestalling the developments contained in Mr. Whitehead's recent monograph. So far, indeed, from depreciating Mr. Whitehead's labours, I was the first to hail, in print, his appearance in the scientific field in which I am engaged, and to bear testimony to the value of the important statistical and other evidence which he has brought forward.

The plain statement of facts on this point, as far as I am concerned, is as follows:—In 1840, whilst interne at the Hospital of Saint Louis, Paris, I attended the practice of M. Boys de Loury, one of the physicians of the neighbouring hospital-prison of St. Lazarre, where diseased prostitutes are confined and treated. I thus became acquainted with a series of facts, undoubtedly brought to light for the first time, in the history of medicine, in that hospital, by the constant use of the speculum in the treatment of the syphilitical patients,—viz., that pregnant women are often affected with inflammatory ulceration of the cervix; that this disease, if left to itself, *generally* occasions abortion, (*vide* my work, page 48,) and that not only is the use of the speculum unattended with any risk, but that it is often the only means of preventing abortion by curing the disease. The knowledge of these facts, however, even when I left Paris, was confined to the officials of St. Lazarre, the most eminent French accoucheurs and writers appearing even to this day as ignorant of them as their English fellow-practitioners. During my residence in the Paris hospitals, I had, subsequently, repeated opportunities of ascertaining the correctness of these views; and when I published my practical treatise on "Uterine Inflammation," in 1845, I mentioned them more than "incidentally," and gave as illustrative of abortion *prevented*, two cases taken from the thesis of my colleague, M. Costilhes. This thesis was then the only notice of the above facts with which I am acquainted in the entire range of medical literature, ancient or modern.

I was not, however, aware at that time of the extreme frequency of this morbid state as a cause of abortion—that it is, indeed, the principal cause of abortion—nor do I believe that any one else was, not even M. Boys de Loury himself. Subsequent researches in a wider field, opened to me by a midwifery appointment, shortly afterwards proved to me that such is really the case; and in September, 1846, as above stated, I laid the result of my more extended experience before the profession, in a series of papers, which appeared in the *Lancet* of that year—the first having been previously read before the British Association, at Southampton. These papers contain, as I asserted in my former communication, most of the facts respecting ulcerative inflammation of the cervix in pregnancy, and as a cause of abortion, brought forward in Mr. Whitehead's recent work, and also others which he does not notice.

In repeating this assertion, I wish it to be understood, that I do not accuse Mr. Whitehead of plagiarism, and that I have no doubt but that his researches were (latterly,) carried on simultaneously with mine, as he states to have been the case. I merely wish to substantiate my claim to having published the data in question, in an abridged form more than two years before, and in *extenso*, nearly a year before the appearance of his work. Had Mr. Whitehead, in his preface, mentioned *what had been done before him*—what was the actual state of science on the subject, giving me credit for what I have written, and then entered into the explanations contained in his recent letter, all vindication of my position and claims would have been unnecessary.

In conclusion, I hope Mr. Whitehead will credit me when I state again that nothing can be further from my intentions than to wish to diminish the value of labours, the importance of which no one can so fully appreciate as myself. It would, indeed, be singular, were I to quarrel with the only ally that I have yet met with, when that ally brings to the support of the views which we are *now* both endeavouring to establish, so important a mass of statistical data. Indeed, I am too much gratified to have met with such assistance in my endeavours to place this important branch of obstetric medicine in its true light, not to hail Mr. Whitehead's appearance as an author with the greatest pleasure. Trusting that this explanation will prove satisfactory,

I remain, Sir,

Your obedient servant,

HENRY BENNET, M.D.

Cambridge Square, Hyde Park,
October, 1847.

Medical Intelligence.

DESTUCTION OF THE POISON OF CHOLERA.

Mr. Herepath, of Bristol, states in a letter to the *Times*, that from a series of experiments made at the last visitation of cholera, he had ascertained that the poison which generated the disease was destroyed by chlorine, or a heat of 300°.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, October 8th, 1847:—C. Thompson; W. M. F. Chatterley; W. Garstang; C. H. Hitchen; D. Mackinder; J. R. Walker; A. Burton; R. D. Staller; L. W. Stewart.

Friday, October 15th:—T. H. Tuke; C. B. Wilson; E. H. Owen; J. M'cNicoll; W. C. Kelaart; H. J. Waterland; H. D. Benwell; R. Branwell.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, September 30th:—Horatio Coare Brenchley, Maidstone; Thomas Hood, London; Joseph Rushforth; Henry Fowler Jenkinson, Doncaster; Samuel Fowell, Norwich; George Bellasis Marfen, Stafford.

Thursday, October 7th:—John Owen, Mold; John Pierce Bowling; Walter Brown, Bridlington.

OBITUARY.

Died, September 21st, Thomas Tucker Price, Esq., M.R.C.S., of Hereford.

October 1st, at Drumard, near Enniskillen, aged 38, Waller Dane, Esq., M.D.

October 2nd, at Brookborough, of typhus fever, James Houghton, Esq., M.D., Medical Attendant of the Fever Hospital and Dispensary.

October 3rd, at Belfast, of malignant fever, Alfred Anderson, Esq., aged 27, resident surgeon of the General Hospital.

October 4th, at Tottenham, John Morgan, Esq., F.L.S., Member of the Council of the Royal College of Surgeons, Surgeon and Lecturer on Surgery at Guy's Hospital.

October 5th, aged 50, Thomas Powell, Esq., M.D., Physician and Governor to the Nottingham Lunatic Asylum.

October 7th, at Belfast, aged 67, David Moore, Esq., R.N., Medical Officer of Quarantine.

October 8th, at Lower Phillimore Place, Kensington, aged 59, Alfred Hardwicke, Esq., M.D., a Member of the Council of the Provincial Medical and Surgical Association.

BOOKS RECEIVED.

The Dublin Dissector, or System of Practical Anatomy. By Robert Harrison, M.D., M.R.S.A., F.R.C.S., of Ireland and England; Professor of Anatomy and Surgery in the University of Dublin, &c. &c. Fifth Edition. Dublin: Hodges and Smith. 1847. 8vo, 2 vols., pp. 871, with numerous Illustrations.

A Treatise on Diet and Regimen. By William Henry Robertson, M.D., Physician to the Buxton Bath Charity. Fourth Edition. Volume 1. London: Churchill. 1847. 8vo. pp, 354.

A Guide to the Examination of the Urine in Health and Disease, for the Use of Students. By Alfred Markwick, Surgeon to the Western German Dispensary, &c. &c. London: Churchill. 18mo. pp. 155.

Guy's Hospital Reports. Second Series. Vol. V. London: Highley. 1847. 8vo. pp. 212. Plates.

Inquest on Miss Sophia Dallett, &c., with an Appendix. Edited by John Rose Cormack, M.D., Edin., F.R.S.E., Fellow of the Royal College of Physicians of Edinburgh, &c. &c. London: Churchill. 1847. 8vo. pp. 42.

Proceedings of the National Medical Conventions, held in New York, May, 1846, and in Philadelphia, May, 1847. Philadelphia. 1847. Large 8vo., pp. 175.

The Microscopic Anatomy of the Human Body, in Health and Disease, &c. By Arthur Hill Hassall, F.L.S., &c. Part XI. London: Highley.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

Mr. Crompton, of Manchester, being appointed by the Provincial Medical and Surgical Association to draw up a report on burns and scalds, embodying, as far as possible, the experience and opinions of the profession, we, the undersigned, earnestly request that the members of the Association will afford Mr. Crompton such information on the subject as they may be possessed of, and that they will further his inquiries by every means in their power.

(Signed)

JAMES HEYGATE, M.D.,
President of the Association.

CHARLES HASTINGS, M.D.,
President of the Council.

Dated September 4, 1847.

TO CORRESPONDENTS.

Communications have been received from Mr. F. Buckell; Dr. Paxton; Sir John Fife; Dr. G. C. Watson; a Retired Surgeon; the Bath Pathological Society; Mr. D. Mc'Donald; Dr. Kennion; Dr. Wardell; Mr. C. Anderton.

The continuation of Dr. Paxton's Paper on the Epidemic Fever of Rugby, and some other communications, are unavoidably postponed to the next number.

It is requested that all letters and communications be sent to Dr. Streeten, Foregate Street, Worcester. Parcels and books for review, may be addressed to the Editor of the Provincial Medical and Surgical Journal, care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

PRACTICAL OBSERVATIONS ON THE CEREBRAL DISEASES OF CHILDREN, CHIEFLY BEARING ON THE SUBJECT OF DIAGNOSIS IN HYDROCEPHALIC AFFECTIONS.

By Thomas Salter, F.L.S., F.R.C.S., Fellow of the Royal Medical and Chirurgical Society of London.

(Read at the Annual Meeting of the Southern Branch of the Provincial Medical and Surgical Association, held at Winchester, July 22, 1847.)

Having often experienced, especially at an early period of my practice, considerable difficulty in the diagnosis of the cerebral diseases of children, and in discriminating between them and other affections which simulate them in their cerebral symptoms, I have, with a view of fixing the attention more strongly and pointedly on those signs which, from experience, I have been led to think are most to be depended upon, put together a few observations in the present communication on the subject, accompanied with several abridged illustrative cases; not, however, with the idea that anything I may have to offer will prove very novel or particularly instructive, but with a hope that by calling the attention afresh to a class of diseases which, in a majority of cases, have hitherto had a fatal termination, some good may result. Whatever induces us to re-consider our former views or opinions, can scarcely fail to be productive of advantage.

M. Rilliet's essay on the "Simple Acute Inflammation of the Membranes of the Brain in Infants," is a valuable contribution to medical science; it will considerably aid the practitioner in his discrimination of this difficult class of diseases. I was led by the perusal of the translation of this work, which appeared in the pages of the Journal of the Society, to turn to my note book, and to the selection of the cases before referred to.

The knowledge and treatment of cerebral disease is, I believe, now confessedly considered the most obscure department of practical medicine. We have it not in our power to employ those physical modes of investigation which we, with so much success, avail ourselves of in the diagnosis of thoracic and abdominal disorders. We are yet left to gather our opinions from general symptoms and functional sympathetic disturbances, such as were formerly our only guides in searching into the ailments of the organs contained in the larger cavities of the body. The difficulties thus imposed upon us I have not only personally and painfully experienced, but have had some opportunity of witnessing the embarrassments, and I may add, errors of diagnosis in others, and in some who enjoyed long experience, and who had obtained high reputation. The chief source of these errors of diagnosis have, I think, arisen from confounding arachnitis with bilious and infantile remittent fevers, and overlooking that depressed state of the nervous system in infants simulating hydrocephalus, and pointed out with so much clearness and talent by Dr. Marshall Hall, and the late Dr. Gooch.

The division of meningitis of infants into the *acute* and *tubercular* is, perhaps, for practical purposes the best, being based upon correct and obvious pathological differences. The latter variety, which had for many years obtained by common consent the name of hydrocephalus, has been delineated and treated of by many authors of distinguished talent, but has not been more graphically described than by Dr. Fothergill, in the fourth volume of the "Medical Observations and Inquiries." His pathology and treatment, however, will not bear a similar commendation.

Whether the celebrated deduction of M. Louis—that if tubercles be found in the brain they are sure to be met with in other organs, especially the lungs,—be true or otherwise, it matters but little; hydrocephalus or arachnitis of children being with few exceptions essentially a disease belonging to the strumous diathesis. I believe in a majority of instances, this celebrated pathologist's opinion will be found to be correct, even in children, but to whom indeed he does not extend it if under fifteen years of age. I think, however, there are good grounds for doubting the converse of the proposition,—that tubercles being found abundantly in other organs, and the patient dying of hydrocephalus, they must necessarily be found in the brain and its membranes; but whether tubercles be present or not, the excited vascular action leading to effusion partakes of the atonic character of strumous inflammation, and in so delicate an organ as the brain, is little amenable to treatment.

The disposition of miliary tubercles in the lungs and abdominal organs will sometimes take place to a great extent, yet, giving rise to no very prominent symptoms, their existence has not been suspected, but a fatal attack of hydrocephalus having supervened, examination after death has led to their discovery.

The origin of strumous disease, whatever may be its remote or predisposing cause, must mainly be referred to mal-assimilation and sanguification, or what may be called, strumous dyspepsia. In discriminating between tubercular or strumous meningitis and complaints simulating it, the constitution of the patient, and the history of previous ailments, call for our first attentive observation.

The symptoms most pathognomonic and those belonging to an early stage, are frequently the simultaneous occurrence of sickness, pain of the head and bowels; the vomiting sometimes, after obstinately persisting for three, four, five or more days, will then generally cease, and a favourable prognosis is not only inferred, but the circumstance is often adduced as a confirmation of an opinion that had been previously given, that the case was altogether one of gastric or biliary disorder, and thus the fatal delusion is completed. I cite the following case as one in point:—

MENINGITIS, SIMULATING BILIOUS REMITTENT FEVER.

On November 30th, 1846, I was called to visit, in consultation with a physician, and the ordinary medical attendant of the family, a child between two and three years of age. I was informed that the indisposition was of nearly three week's duration, that the early symptoms were languor, sickness, and vomiting, slight fever with pain in the bowels, and some headache, and that at the present time, though the sickness and vomiting had disappeared, a functional disturbance of the chylopoietic organs constituted the most prominent features of the case, confirming the view of the gentlemen in attendance, that it was an ordinary instance of the bilious remittent of children, which was alleged to have gone on favourably; and it was stated in confirmation of this view, that the patient was sufficiently well on the day previous to my visit, to have been drawn out for an airing in a child's carriage, but that a change had taken place within a few hours which had made an unfavourable impression on the minds of the parents.

I found the patient lying on a sofa, apparently asleep, but which more particular observation induced me to think was commencing coma. On raising the upper eyelids, (which was not resisted,) the pupils appeared larger than natural, and were sluggish in their movements; there was also a vacant expression of countenance. With these symptoms, slight muscular twitchings were observed, and I thought a want of due power in one of the upper extremities. Connecting the present appearances of the case with the early symptoms, especially the vomiting, and the absence of the latter as the case progressed, from the diminution of the sensibility of the brain, I felt no hesitation either as to the nature of the disease, or on the subject of prognosis. But the gentlemen who had watched the case, one of them from its commencement, and the other nearly so, both persons of considerable experience, felt assured in their own minds, that it was one of fever, and that nothing had occurred to warrant the opinion of the existence of distinct cerebral disease. However, soon after I left the house, convulsions came on, and before the morning the child died.

There is another symptom on which I have been in the habit of placing great reliance, as a diagnostic of arachnitis or hydrocephalus, but which unfortuuately makes its appearance at a period when there is little or no hope of recovery, and indeed is itself an evidence of the speedy arrival of an unfortunate issue of the case. I once thought that this symptom was an infallible forerunner of death, but I am now disposed to believe that I have seen one, if not more exceptions to the rule; still I am convinced that these exceptions will occur so rarely, that in giving an unfavourable prognosis, little apprehension need be entertained of loss of reputation from an error of judgment, in any case in which this sign is present, after the occurrence of other suspicious antecedent symptoms, especially the presence and disappearance of vomiting, followed by sighing respirations. The symptom here referred to, is a *highly congestive state of the vessels of the conjunctiva* commencing at the canthus of one or both eyes, more frequently both, generally first noticed at the inner canthus, occurring about eight, ten, or twelve days from the accession of the attack. On first observing it perhaps only one or two vessels will be noticed fuller than natural, taking a direction from the canthus toward the margin of the cornea, but this congestive state once begun, it in general steadily progresses, until the eyes assume somewhat the aspect of ordinary conjunctivitis. Concurrently with this appearance, there is an increased and altered secretion from the Meibomian glands, causing the eyelids occasionally to adhere, and when this secretion passes over the surface of the cornea, it produces that filmy appearance of the eyes, often noticed. Though the congestive condition of the conjunctiva generally comes too late to be of any avail as a guide in a curative point of view, it is, negatively, a sign of great importance as a help to diagnosis in difficult or doubtful cases; as for example, in instances of infantile remittent fever, simulating hydrocephalus, if this symptom does not shew itself after the lapse of twelve or fourteen days from the beginning of the attack, the case may be safely pronounced to be fever, and a more favourable prognosis given. If previously to the occurrence of congestion of the conjunctiva, the pulse has been slow and irregular, which, when it arises, is one of the most characteristic signs of the second stage of the disease, it will now be much accelerated, and frequently become very rapid, ranging from 120 to 160 in the minute.

I cite the following case as one that particularly interested me at the time of its occurrence, and I introduce it here, as my diagnosis and prognosis were solely founded on the condition of the conjunctiva just described. The impression it created on my own mind was the more deep, from my having the misfortune to differ in opinion from the medical gentlemen, all of high character and much experience, who were in attendance previous to my seeing the patient, and two of whom continued to watch the case with me to its termination.

MENINGITIS. WITH CONGESTION OF THE CONJUNCTIVÆ.

The subject of the case was the son of a gentleman living at a considerable distance from my residence, four years of age. It was stated, that previous to this indisposition, he had uniformly enjoyed good health; indeed it was said, that he had never before been ill. He had been complaining nine days when I saw him, which was on the 12th of January, 1834, and had been under treatment seven days; two physicians and a surgeon were in attendance. The case was considered one of infantile remittent fever. I found the patient in bed, lying upon his back, restless, constantly throwing his hands and arms about, and rolling his head; he did not appear to be sensible; the eyes were filmy, and void of expression, with large and sluggish pupils; conjunctivæ much congested, especially those portions of the membranes lining the lower lids, and at the angles of reflexion; there was also an abundant secretion of muco-purulent matter about the edges of the eyelids; the pulse was 140, feeble; the skin scarcely above the natural temperature; he was much teazed with a loose cough, but without wheezing or bronchial rattle. There was a blister upon the chest. I was informed that at one period the pupils were contracted to a point. I gave it as my opinion that the case was one of arachnitis, in the last stage.

I was to have visited the patient the following morning, the 13th, but receiving a message that he was dying, did not see him; but this event not happening, I saw the patient in consultation on the 14th, and was told there was some improvement in his situation; he certainly did not appear to be worse than when I first saw him. The following is the report of the 15th:—

Restlessness not so great; the eyes clearer; pupils contracting and dilating readily; more sensible; evacuations from the bowels neither dark nor pitchy, but a little inclined to green, when his attention is not roused the eye-balls are drawn up under the brow, and the pupils become dilated. The dilatation of the pupil under this movement, I considered unfavourable; had the patient been in healthy sleep, the pupils would have been contracted. However, the general improvement of the patient was considered to militate much against the opinion which I had, perhaps hastily, given.

The 16th and 17th were passed with but little variation in the symptoms, but it was supposed, upon the whole, that the case had rather improved, and I did not see the patient on either of these days. My last visit was made on January 18th. I found the friends and medical gentlemen all cheerfulness at the improvement that had taken place; the eyes were more intelligent; conjunctivæ less congested, and vision apparently perfect; the patient seemed quite sensible, knew his father, and put his arms about his neck, and put out his tongue when desired to do so; the pulse, however, had not come down, which it ought to have done, to have justified a favourable prognosis. Still appearances were now more than ever against my opinion; all I could say was, that if the patient recovered, I should see what I had never seen before.

I was not to repeat my visit on the next day, but the day after; on this, the 20th, I received a message before I had risen in the morning, to say that the patient had died in the night.

The apparent improvement in this case was very striking, and certainly gave rise to some doubt in my mind as to the correctness of the opinion I had ventured to give. I believe, however, that such partial ameliorations are not altogether uncommon in cerebral diseases. Aretæus, Dr. Cheyne, and Sir H. Halford, have noticed these spurious and delusive appearances of amendment. It is not to be supposed that the gentlemen who saw these two cases with me were not highly competent observers of disease, but it is clear, however, that they must have been misled by the early symptoms, which in their opinion were dissimilar to those that usually take place in these affections. All I am desirous to adduce from these circumstances is, the difficulty of diagnosis which sometimes arises in the cerebral diseases of children, and the following short case demonstrates this fact in a still more palpable manner.

One of the least equivocal signs of the existence of a serious morbid lesion of the brain is *a loss or diminution of motor power*. Excessive or irregular muscular actions, as convulsions, are less to be relied upon, as these often occur, to a great extent, in the diseases of children, and may portend little or no danger, but the slightest indication of paralysis must always be regarded as a fearful symptom.

ARACHNITIS; LOCAL PARALYSIS.

September 6th, 1838. I was sent for to see the son of a gentleman, three years and a half old, who was said to be slightly indisposed; he was left under the care of an aunt during the absence of his mother, who had gone a journey into Lancashire. It was more on account of the responsibility felt by the former relative, than from the supposed existence of any alarming disease, for which my assistance was required. There was some feverishness, gastric disorder, and constipation; for these, the usual remedies were prescribed. Time passed on until the 16th without much variation in the symptoms, the patient apparently neither getting better nor becoming worse; but on the following day I had no doubt of the existence of arachnitis, and that it had been insidiously progressing from the time that I was first called in, and which more attention and care might possibly have enabled me to have detected earlier,

The hair was removed from the scalp, and a cold lotion applied; leeches were put upon the temples, and a blister to the nape of the neck; calomel was exhibited internally. These remedies were persevered in with little or no amelioration until the 19th, when a physician residing in the town was requested to see the patient with me. He appeared to concur with the opinion I originally entertained, and stated that there were *now* no evidences of the existence of arachnitis; the lotion, however, was continued, and calomel, with powdered kino, (the latter to prevent the former passing off by the bowels,) was given every three hours, and an opiate at night. I visited the patient with this gentleman (who still gave a favourable prognosis,) on the 20th, 21st, and 22nd. On entering the room on the morning of the last day, I observed that the right eyelid was closed, and on careful examination, that the power of the levator palpebræ was lost. I pointed out this circumstance to my coadjutor in the case, but it did not appear to produce any change in his views. I, however, felt assured that the function of the right motor oculi was interfered with, either by the pressure of effused fluid in the areolar structure of the pia-mater at the base of the brain, or that softening of some portion of the medullary matter of the right hemisphere or crus cerebri had taken place, and consequently I predicted a fatal issue. At eight o'clock in the evening of the same day, convulsions came on, and only ceased with the child's death, which occurred before midnight.

In estimating the value of symptoms indicative of the cerebral diseases of children, the state of the pupils and the appearances of the alvine discharges ought not to be overlooked. Much importance was formerly placed upon the size of the pupil in these affections, and if found not dilated, a favourable prognosis was generally given. I have often been amused at the formal and ceremonious manner in which a lighted candle has been made to approach and recede from the eye, in order to discover its condition; beyond the influence produced on the minds of anxious parents and attendants on the sick, little advantage can accrue from the experiment. This opinion I ventured to give in the year 1819, in a paper published on this subject in the *Edinburgh Medical and Surgical Journal.* In the early stages of hydrocephalus, in which alone treatment will commonly prove of any avail, the pupils will frequently be found contracted, and if the eyes are examined during sleep, even after dilatation has commenced, this will sometimes be the case; and moreover, strange as it may appear, when unequivocal and real dilatation of the pupil has been established, it will sometimes further enlarge on the near approach of a strong light. The condition of the pupil is no sure guide apart from other symptoms. In delicate children, even in health, it is often large and sluggish in its movements, and much more so when such subjects are labouring under any indisposition. When, from the progress of the case, the pupil is really dilated, it is obvious enough, and did not other concurring unfavourable symptoms sufficiently point to the probable fatal termination of the case, I still admit that some reliance might be placed upon it as a guide both to diagnosis and prognosis, especially if the dilatation be confined to one iris. The considerable restoration to a normal condition of the iris, in the second case above recited, is strikingly calculated, if other experience were wanting, to lessen confidence in a symptom which has hitherto been so much relied upon.

In the paper just referred to, in the *Edinburgh Journal,* I also ventured some remarks on the discharges from the bowels. I believe it is now generally admitted, that nothing is more easy than to produce, what were then called, hydrocephalic stools. A few grains of calomel, and sometimes any irritating purgative, will prove sufficient. Such evacuations are observed in many of the diseases of children, even apart from the action of medicine, when the chylopoietic organs, and especially the large intestines, are much excited. Dr. Fothergill, I believe, was the first person to direct attention to these peculiar alvine excretions as pathognomonic of hydrocephalus, and by him, as well as by subsequent writers, their peculiarity was supposed to arise from some particular morbid condition of the bile; but in many *post-mortem* enquiries which I have made in reference to this matter, I have failed to find the green oily-looking stools in the small intestines, I have therefore inferred that their appearance is due to some change effected in the bile in the tract of the colon.

The insidious character of the meningitis of children, especially in individuals having a well-marked strumous diathesis, should never be lost sight of; in such cases, for many days, there are often no very prominent symptoms; frequently the head is not complained of; listlessness, languor, a disposition to be alone and lie down and doze, with or without an occasional tendency to sickness, may alone have been noticed, when all at once, the most grave and alarming symptoms, as strabismus, dilated pupils, and convulsions, make their appearance, to the dismay of the medical attendant, and the consternation of the friends of the sick.

If in the doubtful circumstances here referred to, sickness and vomiting should be present in any degree, and not obviously and unmistakeably arising from other causes than those which might be referred to the head, it will be safest to consider the disease as seated in the brain.

As far as my experience has enabled me to judge, vomiting is s symptom highly pathognomonic, and most to be relied upon; but, unfortunately when it has arisen, the disease, in a majority of instances, may be considered as fully established; therefore the great desiderata to become acquainted with, are the antecedents to this state of things, and these probably will be found to be very different in different cases. A further consideration of the subject in this direction would lead

to observations on those conditions of the system which have been supposed to mark a predisposition to the disease under review, and to the subject of prophylaxis; and I fear to the acknowledgment that we are more likely to be successful in the prevention than in the cure of hydrocephalus. But this not coming within the object of my communication, I pass on to a condensed recital of some additional cases, illustrative of my remarks and conclusions, diagnostic of arachnitis. The first is an example of genuine tubercular meningeal inflammation, and well contrasts with the last case, which was an instance of the acute disease, unconnected with struma.

TUBERCULAR MENINGITIS.

The subject of the following case was a little girl, whose age was unfortunately omitted to be noted, the child of poor parents. I visited her for the first time, October 5th, 1828, and found her labouring under well-marked symptoms of hydrocephalus. I learnt that she had been seriously ill about a week. The disease was at this time passing into the second stage; pulse slow and irregular; pupils dilated, with a tendency to coma; she had previously had persisting sickness, with headache. It appeared on further inquiry, that for several months previous to the present attack, she had been out of health, having complained besides of abdominal pains and tenderness, of a dry cough, and some difficulty of breathing. These symptoms were attended at times with fever, having afternoon paroxysms; but notwithstanding these indications of serious disease, the appetite kept up, and she did not lose much flesh. It was also reported that when the head symptoms became decidedly developed, the cough and difficulty of breathing disappeared.

The remedies which the circumstances of the case then called for were prescribed, but the bad symptoms succeeded each other in their usual mode of progression, and the patient expired on the 16th, eleven days after my first seeing her, and twenty-three from the date of the attack, being about the average period of the duration of these cases.

On dissection, granular tubercles were found abundantly scattered over the surface of the meninges; the arachnoid in many parts was thickened and opaque, and beneath it was an abundant serous effusion, especially at the base of the brain, where, in the neighbourhood of the optic nerves, it put on a gelatinous appearance. The ventricles were distended with fluid; the foramen of Munro unusually large; the parietes of the ventricles, more especially the fornix, were very soft, and easily torn. The lungs collapsed on exposure to the air; there were no pleuritic adhesions, but miliary tubercles were abundantly dispersed on the pulmonary pleura, and in the parenchyma of the lungs; there were also a few tubercles of larger size, in which a process of softening had commenced. The peritoneal coat of the liver was inflamed, and small tubercles, about the size, and having the general appearance, of mustard seeds, were seen on its upper surface, and on the corresponding face of the diaphragm, where they were of larger dimensions, and more numerous. Recent and very delicate cellular adhesions subsisted between the liver and diaphragm;* the spleen was also in a tuberculated state, indeed much more so than any of the other viscera.

HYDROCEPHALUS; PUPILS NOT DILATED.

In March, 1812, I was called to attend with my late partner, Mr. Bell, a female child, (Martha Best,) two years of age, whose health for the last three months had been considered good, but before this time, she had been thought weakly, and was frequently ailing. She lived only ten days from the supposed commencement of the attack, which began with vomiting. The sickness continued to harrass the patient with but short intervals, for five days; there was then an intermission of three days from sickness and vomiting, when it returned and did not cease until the child's death. The pulse was first slow and intermitting, afterwards very frequent, but the circumstance that most attracted attention, was the natural condition of the pupils, there being no dilatation; the contractions and dilatations on the approach and withdrawal of light were normal.

The following is the account of the autopsy:—The anterior fontanelle not closed. Nothing unusual was observed. In the membranes or on the upper surface of the cerebrum, but on a horizontal section being made in the usual manner, an undulation of fluid was visible in the ventricles beneath, which on being opened, were found to contain a considerable quantity of limpid fluid. The commissura mollis was torn through, and the thalami separated and some distance apart, by the distending action of the fluid in the third ventricle; the anterior and posterior commissures appeared longer than natural, as if from a process of stretching, and the apertures opening into the third ventricle, were much larger than their natural size from the same cause.

Though the ordinary duration of hydrocephalus is from two to three weeks, it occasionally runs its course in a few days, the disease in its progress leaping, as it were, from the first to the last stage, passing over altogether the second stage of the complaint, and should the third stage happen to be of short duration, and the early symptoms have failed to have made a proper impression on the minds of the friends, the medical practitioner may only be called to witness the death struggles of his patient, as in the following case. But how important is it in the alarm and consternation which cannot fail to arise in the minds of the attendants, both for his own reputation and the satisfaction of parents, that he should be able to give a correct diagnosis and prognosis. This, perhaps, it will not always be easy to do, still the necessary information may generally be obtained from the history of the occurrences of the previous two or three days, and from facts that may be collected respecting the constitution of the

* This is a lesion opposed to the experience of Dr. Budd, who, in his recent very excellent work on "Diseases of the Liver," remarks,—"I have never met with an instance in which they (tubercles,) seem to have caused adhesive inflammation of the liver, or its capsule."—Page 107.

patient; this information, collated with the symptoms present at the time of his visit, will generally enable him to form a tolerably correct opinion of the nature and probable issue of the case he is called upon to treat.

ARACHNITIS RAPIDLY FATAL.

Feb. 8th, 1813. My assistance was desired for the relief of a little girl, nine years of age, whom I found with the following symptoms:—Insensible; tonic spasm of the voluntary muscles; limbs extended and rigid; joints immoveable; mouth firmly closed; eyes wide open; left pupil remarkably dilated, but not entirely insensible to light; pulse 160; heart beating with great force; skin cool. These symptoms came on suddenly, preceded by headache and sickness for a few days only, and which had not caused any alarm for her safety. The child died in three hours from the time of my being called in, without any material change having taken place in the symptoms.

I learnt that the patient had not enjoyed robust health, and was frequently the subject of headache, and she had also been much troubled with ascarides. Her eyes were dark; complexion pale; her person tall and thin. I was permitted to examine the head, but the chest and abdomen were not allowed to be opened.

The following were the morbid appearances presented on dissection:—The dura mater adhered with great firmness to the cranium; the longitudinal sinus was unusually free from blood or coagulum; the arachnoid opaline, and somewhat thickened, having a considerable effusion of fluid beneath it, occupying the interspaces of the convolutions; about two ounces of fluid were found in the ventricles; the foramina of communication were considerably enlarged; the sides of the third ventricle a quarter of an inch asunder; a similar effusion existed beneath the membrane in the ventricles, analogous to the arachnoid, as was observed on the surface of the cerebrum; there was an abundant effusion at the base of the brain; the vessels of the plexus choroides were extremely turgid, and those of the velum interpositum in a similarly congested state; the medullary substance of the brain was soft.

M. Rilliet, in his account of "Simple Acute Inflammation of the Membranes of the Brain in Infants," divides it into two forms,—the "convulsive" and the "phrenitic." The case I am about to relate comes under the former denomination. It would appear that these forms of meningitis are distinguished from the tubercular by the suddenness of the seizure, the greater violence of the symptoms, and the shorter duration of the disease, not often lasting beyond the third day; and also from the apparent absence of the strumous diathesis. These affections do not differ less in their morbid anatomy than in the circumstances adverted to; whilst in the tubercular division of these cerebral affections, the violence of the disease would seem to exhaust itself upon the base of the brain. In the simple acute inflammation of the membranes in infants, the meninges of the convexity suffer most, and in the latter there is always an entire absence of tubercles.

The notes of the following case, taken many years ago, and of course without reference to any particular pathological opinions, would appear to support, as far as it goes, the views propounded by M. Rilliet:—

CONVULSIVE MENINGITIS.

On Tuesday morning, March 12th, 1833, I was requested to visit a child six months old, who, previously to the commencement of his present indisposition, was remarkable for robust health. I was informed by his mother, that on the Sunday previous, (March 10th,) the child did not appear in his usual spirits, cried, and was fretful when played with as heretofore; he passed the Sunday night in a restless manner. On Monday morning he was manifestly indisposed, and vomited, throwing up a bilious-looking fluid; he also was noticed to be distressed when moved, and the eyes had a heavy appearance. The symptoms noted on my visit were the following:—Skin hot; frequent pulse; countenance pale; expression idiotic or vacant, evidently devoid of intelligence; frequent vomiting. Leeches were applied to the temples, and a cold lotion to the head; to these remedies some medicines and a tepid bath were added. Convulsions came on early in the afternoon, and continued the whole of the night, and the two following days and nights, with only very short intermissions, until the patient's death, which took place on the 14th, three days after I first saw him.

The following is the account of the examination of the body:—Dura mater somewhat more vascular than natural; the longitudinal sinus contained a large pale coagulum, with processes stretching into some of the veins of the pia mater. On raising the dura mater, a most extraordinary appearance presented itself: the convolutions of both hemispheres were nearly obscured, and the natural aspect of the pia mater lost by an abundant deposit of yellow lymph into its cellular structure, occasioning that membrane in many parts to be a line and a half in thickness. This effusion around the veins of the pia mater gave them the appearance of small cords, which when cut across preserved a rounded figure, with a small red point in the centre, indicating the situation of the former cavity of the vein, but which was now obliterated by the pressure of the lymph: a few veins escaped this change. The arachnoid was thickened, and raised in some parts by a watery effusion. The state of the pia mater above described, though more apparent upon the upper surface of the hemispheres, also existed on the greater portion of the inferior parts of the cerebrum, and on some portions of the cerebellum. The velum interpositum also was similarly affected. The ventricles contained a considerable quantity of fluid. The substance of the brain was unusually soft and vascular. The viscera of the chest and abdomen were carefully examined, but no disease discovered.

In the above citation of cases and observations on the symptoms of arachnitis or hydrocephalus, which I have thought might facilitate the diagnosis of cerebral diseases in children, no particular order has been followed beyond that which a reference to my own case book suggested; it is therefore likely that many

circumstances and symptoms may have been passed over or slightly touched upon, which by others, may be supposed important.

In the consideration of this subject, it is necessary that the mind of the practitioner should be duly impressed with the value of premonitory symptoms; they will efficiently assist him in appreciating those signs on which his diagnosis is subsequently to be founded. The premonitory symptoms are for the most part made up of some of those phenomena expressive general malaise,—such as languor; listlessness; erratic pains in various parts of the body and limbs; mental irritability; a tendency to constipation, with some form of gastric disorder, leading to imperfect assimilation of food, and frequently to its sequence—loss of flesh. The complaint is often ushered in with pain of the head, heaviness, and a disposition to lie down and doze, and generally with a great dislike to motion of every kind, fretting when disturbed. A due attention to the state of the pulse is of the first consequence; on this symptom, as is well known, Dr. Whytt bases his division of hydrocephalus into three stages, the first and last being marked by a frequent pulse; the second by a slow and sometimes an irregular one. But all who are practically acquainted with the disease, know that the symptoms of arachnitis are by no means uniform, and that the stages are often remarkable for the great diversity in their duration; in some cases, the early stage of excitement is not observed, whilst in others it may last several days; occasionally the second stage does not appear, or is so slightly marked, as to escape notice. In the discrimination of hydrocephalus from the infantile remittent fever, the observation of the pulse may be made very available, as in the latter disease it is rarely ever slow, and never below the normal standard, even in the remissions from fever. In the slow pulse accompanying diseases of the brain, there is a peculiarity which I do not remember to have seen noticed,—which is, that it is *remarkably quickened by the slightest exertion, as turning in bed, &c., immediately resuming its former frequency, as soon as a state of quiescence is obtained.* This state of the pulse exists after concussion of the brain. The respiration in an early period of the disease is sometimes quick and irregular, but its general character is that of slowness and inaudibility, with occasional or frequent sighing. Strabismus and double vision are common symptoms; but the former is rarely noticed before the case is passing into the third stage, and the patient all but in a hopeless condition, and the latter, either from the tender age of the patient, or the state of the intellect, can seldom be availed of as a means of diagnosis.

The one great and important symptom in distinguishing hydrocephalus from other diseases of children is sickness and vomiting. This symptom is not only important as being more pathognomonic than any other individual one, but occurring at a period when it may be hoped the morbid action within the cranium has not made a fatal progress, the idea may be entertained that by the timely use of appropriate means, it is still possible to avert the threatened danger; but in too many instances, it is to be feared, that when this symptom has made its appearance, irrevocable injury has been sustained by the brain or its membranes. Sickness and vomiting being such common occurences at all ages and particularly in childhood, and known to arise under very different circumstances, and from such a variety of causes, it is not perhaps a matter of surprise that its value in these cases should not have been duly estimated. With care and attention, however, to all the existing symptoms, and the previous history of the patient, it cannot be very difficult to distinguish the persisting sickness and vomiting of the early stage of hydrocephalus, either from that which occurs from teething or from ordinary gastric and intestinal disturbance. In all doubtful cases, it is safer to assume the existence of cerebral disorder, since no evil can result from such an error of diagnosis. In the bilious remittent fever of children, the complaint most likely to be confounded with hydrocephalus, vomiting, though occasionally occurring, is not a prominent symptom. Whenever sickness takes place in a child, no trouble or time should be considered too great in investigating or searching after its cause or origin. We know that vomiting is one of the first symptoms that follow injuries of the head. It often happens, when a child falls on its head from a chair or table, that the accident is almost immediately succeeded by vomiting, after which it goes off into a heavy sleep, and this is so exactly like what happens in hydrocephalus, that the inference is abundantly clear, that the brain must be suffering either from congestion or more advanced disease.

The high interest with which the subject of the diagnosis of the cerebral diseases of children is invested, is scarcely more important with reference to the safety of the patient than the character of the medical attendant. Unhappily, as has already been observed, a great portion of these cases has a fatal issue, and should he be misled by the too frequently insidious progress of complaint, and thereby have failed to acquaint the parents with the precarious situation of their child, he has not only lowered himself in their opinion, but will have the mortification to reflect that he has let pass a rare opportunity for establishing his reputation for tact and discernment. Next to the kind feelings which are awarded to successful practice, the friends of the sick feel most grateful by being forewarned of the trouble that is to come upon them, and by shewing that no care or skill has been wanting, that might have brought about a more happy result.

NOTES ON THE EPIDEMIC FEVER OF RUGBY AND ITS NEIGHBOURHOOD, DURING THE AUTUMN OF 1846.

By James Paxton, M.D.

(*Continued from page 535.*)

It is usual, especially in large and populous places, and perhaps very justly, to connect continued fever with the idea of organic debility. With these views the chief object in the treatment has been to attempt to maintain the circulation with wine, cordials, stimulants, and nutritious diet; at the same time, while suppressing relaxation of the bowels by opium, to relieve local determinations by leeches, and to meet morbid irritations by counter-irritation of sinapisms and blisters. With this plan, generally, saline medicines and doses of mercury were administered.

"Whenever the circulation became feeble, wine and stimuli were used in such quantities that could not be supposed to be inert, and the pulse became less frequent and firmer under their use"* "Wine is given for this one lesion of the circulation; the support of this peculiar function of circulation is your object all through:"† with what success we may be able to judge by the following statement:—"Several patients were brought into the hospital suffering from typhus, the tongue was natural, and the pulse 70 or 80, and yet the majority died."‡ Other physicians of equal eminence, have spoken more guardedly when recommending wine, they have entertained suspicions of the general expediency of wine in fevers, even among the same classes as those just alluded to; observing, that "wine should be given a little at a time, when the second sound of the heart is wanting."§ There is an admirable direction given in these words—viz., "Wine should be administered when the skin is cold."‖ The epidemics of Dublin, Edinburgh, and of the metropolis, have been thought to differ from the epidemics of rural districts. They may. This much is certain, that the constitutions of persons resident in confined situations, are little prepared to encounter a struggle with an aerial poison. "The very atmosphere of commercial and manufacturing cities undoubtedly deteriorates the race of men."¶ They are in an unfavourable position to meet disease. Hence the great mortality of populous districts has been justly attributed to this cause. In the London fever hospitals one in seven die. When we know that there has been a low standard of health antecedent to the attack, the expectation of a successful issue under a malignant attack, of an epidemic, is but a forlorn hope. I have gone out of my way thus far in order that we may estimate the relative condition of communities and persons becoming the subjects of fevers.

In considering the late fever of Rugby, such disadvantages as we have just referred to do not exist. Here the air is without carbon in excess, and altogether untainted by the fumes arising from factories. None of the poor are destitute; every one is living in a comparative state of comfort. It is the custom of those who move in the superior ranks of life to visit and relieve the poor, and in times of sickness they watch over them and administer to their temporal and spiritual necessities. Societies thus constituted have more of the moral and physical elements for maintaining their natural tone in the hour of trial, than is known to exist under circumstances which have lately been reported as prevailing in Scotland and Ireland. It is requested all this may be borne in mind, in accounting for results and deviations in practice, in this place, and for adopting a treatment the very opposite to that which has been recommended by practitioners of great experience and high standing in the profession elsewhere.

The successful treatment of our epidemic depended on the strictest attention to regimen: errors in diet were fatal. All kinds of stimuli had the effect of increasing arterial action, congestions, and cerebral disturbance. It was only in the stage of *perfect subsidence* of the malady, that wine could be taken with impunity. I had often to regret the permission I had given to use wine at too early a period. The most mild species of nutriment were the best for the patient. Time after time have I known a generous diet, such as beef tea and wine, to derange the viscera, and to have a direct tendency to excite organs already too much excited by febrile phenomena, and the consequences were invariably a correspondent depression of the vital powers. The principle which suggests wine and the highest nutriment in low fever, in theory is plausible enough. To oppose what was esteemed strength to weakness, is a theory which readily gains an ascendency in the minds of those who are ignorant of the management of diseases. They are haunted by the single perception of *debility*, but the exhibition of wine to counteract the debility, only involved the patient in additional dangers. At the advanced stage of fever, wine is the medicinal extreme unction for the patient's dismissal. In the earlier stages it may be symbolized by the golden cup filled with abominations. There could be no compromise between wine and the Rugby fever. It was not long before I found, that either the nature of the fever, or the peculiar habit of persons in this locality, would not allow of the administration of stimulants without decreasing the chances of recovery. To give an example—

Mrs. P., aged 27, was seized with fever, attended by great prostration of strength, and a disordered state of the bowels. Her appearance was faded, and the pulse feeble and frequent. Wine, and afterwards brandy and water, were given in considerable quantities, which

* Dr. Alison. † Dr. Corrigan. ‡ *Ibid.* § Dr. Stokes.
‖ Dr. Williams. ¶ Dr. Black, of Liverpool.

appeared to comfort the feelings and to suppress the diarrhœa. However, on the fifth day most of the symptoms became more serious. The typhoidal influences were fully manifested; the skin was dry and burning; purple redness of the cheeks; tongue loaded with hæmotose brown mucus, the teeth and lips having an incrustation of the same secretion; the pulse was increased in rapidity and diminished in strength. I scarcely need observe, that with great thirst there was not the least appetite. She was unable to converse with any one for many seconds; her words may be described as muttering and incoherent; there was no voluntary control over the sphincters. None could entertain a favourable impression as to the result; a very different course of treatment therefore was pursued. Hydrarg. cum Creta, gr. x., was directed; afterwards Liquor Sodæ Ch. M. xx., e Mist. Camphoræ, quartis horis. Broth was exchanged for chocolate; raspberry vinegar and water was substituted for port wine negus. The hands and feet were, several times a day, sponged with warm water. In twenty-four hours it became obvious that the system was returning to a more tranquil state. By the fifteenth day the sensorial faculties were clearer, the pulse had fallen to 120, and the tongue was moist and white at the margin. Still as she was complaining of much uneasiness in the cæcal region, with troublesome diarrhœa, the same dose of Hydrarg. cum Creta was repeated, the operation of which, though attended with much inconvenience to the nurse, was of decided advantage to the patient. On the 18th day, having been allowed beef tea, it occasioned an exacerbation of fever and increased disturbance of the bowels. Chocolate and milk was therefore resumed as the only nourishment that could be safely recommended. On the 22nd day a copious diaphoresis appeared critical. There remained indeed, extreme emaciation, but the tongue was gradually improving, (*i.e.*,) the brown receding from the margin and apex. On the 25th day, quinine, with small quantities of hydrochloric acid were prescribed, and the patient was removed from a confined part of the town to a mile distance, where the house was situated in a garden surrounded by fields. This step immediately had the effect of improving her appetite. Her recovery was slow. Four months elapsed before she could return to her home and resume the duties of her family.

The mother-in-law who assisted in nursing this good woman took the fever and died. Three cases occurred in the house adjoining; two of great severity, but as soon as there was subsidence of fever, these likewise were removed into the country, where they recruited their strength in about five weeks. I might briefly observe of one of the last-named cases, a girl, aged 6, who, having the epidemic of the third degree, lost her flesh, had mulberry-coloured fur on the tongue, lips and teeth, with stupor and delirium. Now, tea and pure water constituted the whole of the dietetic treatment for fourteen days, when an inclination for food returning, she was allowed milk diet.

Her brother, aged 10, had a similar attack which reduced him to a mere skeleton. The same plan of treatment as before pointed out, was adopted with a favourable result.

J. B., a boy aged 9, in addition to a severe form of typhus, had peritoneal tenderness, and abdominal tumefaction, which continued seven weeks. Chloride of soda was exhibited with occasional doses of chloride of mercury. As there was a tendency to constipation, tartrate of soda was also occasionally given. When aperients were required, this neutral salt or phosphate of soda were observed to act with mildness and good effect. This boy's diet was solely grapes, chocolate, whey, and toast water. He passed through the worst stages of the worst degree of the epidemic. In three months his health and strength returned.

His sister took the same complaint, as well as a great number of persons resident in that part of the town, (the neighbourhood of Queen Street,) the disease occasioned great loss of mental and physical energy, but fatal terminations were rare. After giving the fairest trial of stimulants and the generous plan of treatment, under the notion of opposing debility, I found that stimulants and cordials were not only unnecessary, but positively injurious. Given by way of support they only occasioned supplimentary fevers. Tea, chocolate, and fruits, were sufficiently nutrient, and might be taken with greater safety than broths and jellies. I have learned to attach much importance to the dietetics of patients in fever. Unless there is a desire for food, the attendants of the sick are unwise in pressing it on the patient. In no case did they sink from want of nutrition, but from morbid actions.

E. H., a youth aged 17, for fourteen days took only soda water; it was grateful and refreshing, and he eagerly drank from six to twelve bottles a day; subsequently grapes and chocolate constituted his nourishment for about a week, and in five weeks he was able to walk out.

As a summary of my observations,—1st. The remote cause of this fever appeared to arise from the reception of an intoxicating poison invading the whole system, and often accompanied by local disorder. The innumerable varieties were dependent on temperature or predisposition. 2ndly. This disease, even in healthy subjects, was lingering; yet in its third degree, and when assuming the most formidable characteristics of typhus, if previous lesion did not exist, a favourable issue might be predicted. 3rd. The depression from the very commencement of the attack marked its asthenic type; it would not, consequently, admit of depletion, unless locally, by means of a few leeches, to relieve engorgement, or where inflammation co-existed with fever. On the other hand, an attempt to strengthen the system by strong animal infusions had a tendency to keep up febrile action.

The immediate cause of fever is now supposed to depend on depraved circulating fluids. There may be in addition, lesions of particular organs, prior or

subsequent to the attack, (as accidents,) generally increasing the danger. Each required its appropriate treatment. The first demanded the exercise of much patience. Disregarding any complaints of weakness, the question for our consideration was not the relative strength and weakness of the patient, but the control of morbid action, and the inducing of healthy functions. The reduction of the animal powers, and the absorption of adipose tissue, is a matter of little moment, when compared with the importance of relieving local congestion, or local affections analogous to inflammation. For instance, when the complaint assumed the form of *typhus cerebralis*, the application of a few leeches to the temples became necessary. Sometimes in these cases blood drawn from the feet by leeches seemed preferable to any other method of depletion. This was followed by small sinapisms to the lower extremities. The hair was cut off, and the head frequently sponged with warm water; I do not mean fomented, but the head merely washed, which had the effect of producing an evaporation from the scalp, and an agreeable feeling. The palms of the hands, and the soles of the feet, were treated in the same way. When the temperature of the skin was unnaturally high, then such ablutions were particularly tranquilizing and refreshing.

In *typhus pulmonalis* frequent small doses of tartar emetic was useful in relieving bronchial affections connected with fever.

The most severe type of fever which we witnessed was that which has been termed *typhus abdominalis*; in such cases the more urgent symptoms were subdued by the exhibition of Hydrarg. cum Creta; and although diarrhœa or intestinal hæmorrhage might be present, this medicine was not on that account to be forbidden, since it was proved to be the most efficacious medicine in correcting the relaxation, and for improving the biliary and intestinal secretions. If the pain in the bowels was acute, the local abstraction of blood by leeches was preferable to taking blood by the arm.

Mrs. S——, aged 31, was affected by the third degree of fever, with paroxysms of great pain in the bowels; being of a full habit of body, blood was abstracted from the arm, and the pain was relieved, but the fever became much more formidable. The pulse, which had been 110, rose after the blood-letting to 130; delirium and involuntary motion of the extremities followed. In this state, for some days, medicines and every thing else were refused, except a little tea and soda water; ultimately she recovered, but her recovery was protracted.

A lady who was on a visit to the above also suffered from a similar attack. In this case doses of the grey powder, citrate of potass, and blisters, gave a safer check to the symptoms, and in three weeks she was able to be removed into the country.

Of this family, consisting of seven persons, four had diarrhœa and fever. It is rather remarkable, that the three who escaped fever were the servants. In a person, where frequent dejections and tenesmus were distressing, compound ipecacuanha, with aromatic confection, was given; but it soon became evident in our practice, that whenever any preparation of opium was resorted to for the restraining of the motions and irritability of the bowels, a greater amount of fever was sure to supervene. Opium had also another ill effect, that of hastening congestion of the brain, and producing alarming lethargy or subsultus.

Soda-water was a most agreeable and valuable beverage. The same may be said of tea, coffee, chocolate and whey. The two last proved just sufficiently nutritive and in every respect beneficial, until the state of subsidence of fever. When there was cough, as a drink, a table spoonful of powdered gum acacia, in a quart of lemonade, was directed. The unsophisticated taste of children, however, at all times instinctively preferred that fluid which is the greatest of all febrifuges, pure water.

Under a state of convalescence much caution was needed in returning to a full diet. The patient in this respect required to be kept back. We frequently observed that the mistaken kindness of friends occasioned a partial relapse. Pressing nourishment against the inclination of the patient, was always attended by ill consequences from the beginning to the end. The best indications for allowing a better diet was a returning appetite and the patient experiencing a desire for food; then, whatever it might be, the appetite should be indulged. The permission was seldom injurious.

ANEURISM OF THE ABDOMINAL AORTA, SIMULATING DISEASE OF THE KIDNEY: RUPTURE INTO THE LUMBAR ADIPOSE TISSUE.

By George Norman, F.R.C.S., Senior Surgeon to the Bath United Hospital, &c.

(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, held at Bath, September, 30, 1847.)

G. M., Esq., aged 68, an Irish gentleman, who had been engaged in active public life, had been subject at different times to gout, but not in any severe degree, and his general health had been good until a year and a half since, when his stomach became deranged, and he began to suffer from a dull, and at times severe, pain in the loins, more particularly in the right side. His physician in Dublin, finding that these pains were not removed by any treatment, advised him to go to Bath, to drink the waters and use the baths, as he considered the pains to arise from deep seated gouty inflammation. Accordingly he came to Bath, in April last, and became the patient of Mr. Church.

Soon after his arrival, it appeared that he had brought with him the infection of the low fever, then prevailing

in Ireland, and for about three weeks he laboured under continued fever. He then began slowly to recover, but his convalescence was soon arrested by a return, in a very severe degree, of the pain in the loins.

As it was evident he was losing ground, Mr. Church, with Mr. Norman, examined the state of the back, on the 29th of May. Mr. M. referred the pain entirely to the right lumbar region, excepting that some pain extended down the right thigh. He had constant nausea, and about this time began to have vomitings. There was no disease discovered by examination of the spine, or of the abdomen, and Mr. Church and Mr. Norman were inclined to believe the disease was in the kidney, although the urine shewed no evidence of disease, excepting in excess of lithic acid, and once or twice a slight trace of blood. Alkaline medicine and sedatives afforded some slight relief, but in two or three days violent pain came on in the back, accompanied by vomiting; the pain continued for hours, and was so intense as to require large doses of opium. It was after this attack that there were traces of blood in the urine, and his medical attendants were the more impressed with the belief that the disease was in the kidney, though unable to decide on its character. For some days the pain continued in a less degree, but in the same part, and the next material circumstance was, that Mr. M., whilst sitting on the night table, became faint, almost lifeless, and without pulse at the wrist, but by being placed on the bed, and the administration of stimulants, he recovered, after some time, and became much as he had been before, excepting that his pulse became weaker, and he lost strength daily, as well as all inclination to take nourishment. He afterwards had three or four more attacks of syncope, but not to the same degree; he became exhausted, and died on the 12th of June, having vomited up a quantity of dark grumous blood for three or four days before his death.

On examination of the body the following day, there were found strong and old adhesions of the pleura in the right side, on which side he had once sustained fracture of the ribs. There were no adhesions on the left side, and the lungs on both sides were free from any trace of disease. The heart was perfectly natural; its valves and large vessels in a normal state. On opening the abdomen, the stomach was seen to occupy a large space, and the upper surface of a dark colour, from the veins being in a congested state. The stomach contained a quart of the same kind of dark grumous fluid that had been ejected previous to death. On the mucous surface of the inferior portion of the stomach was a deposit of lymph, adhering to the surface, but which could easily be scraped off. The mucous surface of that part was red and vascular, but not ulcerated. The liver and gall-bladder were perfectly natural; so also were the intestines, and the left kidney. In the situation of the right kidney was a tumour, extending into the right iliac region, formed by coagulated blood effused into the adipose substance surrounding the kidney, by which the kidney had been forced back out of its usual position, but there was no evidence of disease found in it. On opening the descending aorta, to trace from whence the hæmorrhage had taken place, about three-fourths of that vessel, a little above where the emulgent arteries are given off, was destroyed by ulceration, and the opening communicated with an aneurismal sac, the size of an orange, formed by condensed cellular substance, and covered by the peritoneum. The inner surface of the sac was in a great part formed by laminæ of coagulum. The coats of the artery were all destroyed at the point of ulceration, excepting the remaining three-fourths of its diameter. The ragged edges of the internal coat were everted, as is usual in aneurism. Directly below the ulcerated portion of the aorta, the area of the vessel was contracted, and nearly two-thirds of its circumference were ossified for the length of an inch. In the lower part of the aneurismal sac was a circular opening where it had given way, and through which the blood had passed into the adipose substance surrounding the kidney. The peritoneum being every where entire, no blood had got into its cavity.

Bath, September 30, 1847.

HISTORY OF A CASE ILLUSTRATIVE OF SPECIMENS OF PUNCTIFORM AND TUBERCULAR MELANOSIS.

By Edward John Spry, Surgeon to the Royal Cornwall Infirmary.

(Read at the Annual Meeting of the South Western Branch of the Provincial Medical and Surgical Association, held at Truro, July 16, 1847.)

The patient from whose foot three specimens of melanosis were dissected, was a healthy-looking well-made man, of ordinary stature, aged 45, a labourer in a mine. He was sent to me by my friend and former pupil, Dr. Paddon, under whose care he had been for several weeks, for a troublesome ulceration of the great toe. I found the under part of the toe of the left foot, presenting a large dark-coloured almost sooty mass, moist on its surface, and denuded of skin to the extent of an inch in diameter. The surrounding parts were irregularly tuberculated, soft in some places, hard in others. On the dorsum of the foot were ten melanotic deposits, varying in size from a pin's head to that of an ordinary pea; over two of the larger deposits ulceration had commenced, displaying the same dark half-fluid substance as that described to exist on the base of the toe. It will be seen by an examination of the preparation, that none of the sooty cysts extend to the cellular membrane, but that they are lodged in the true skin.

I advised an immediate removal of the diseased parts, and for that purpose recommended him to go to the Infirmary, where he was admitted on Oct. 30th, 1845, under the care of Mr. Bassett, who, on Nov. 4th, amputated the toe at the metatarsal articulation, and dissected out the two elliptical portions of skin here preserved. The stump healed slowly, and when he left the Infirmary on the 26th of February, 1846, which he did at his own request, there was a superficial sinus or two remaining, and the cicatrix on the dorsum had assumed a bluish appearance.

Some months afterwards he again fell under the care of Dr. Paddon, as surgeon of the mine, who cut out

the diseased parts a second time, but ulceration re-commenced, and the glands in the groin have enlarged, ulcerated, and discharged large quantities of black fungoid matter. I am uncertain if the poor man is yet living, but the last report which reached me of him stated, that he was gradually sinking under his accumulated miseries.

I should add, that the diseased toe was found to consist of a mixture of melanotic and fungoid matter, and that the softening had extended to the bone, destroying the articular cartilages.

[The preparations referred to were exhibited at the meeting.]

CASES FROM PRIVATE PRACTICE.

By John Richard Wardell, M.D., Edin.;

Late President of the Royal Physical and Hunterian Medical Societies, Assistant Pathologist in the Royal Infirmary, Edinburgh, &c. &c.

(*Continued from page 574.*)

CASE. III.

Puerperal Convulsions.

February 2nd, 1847. Summoned in great haste at two o'clock this morning to see Ann W——, residing at a village two miles distant, who was reported to be in labour under the charge of a midwife, and very dangerously ill; indeed so precarious was her condition, according to the messenger, when he was despatched, that he thought it highly probable she was not then alive. On arrival I found the patient to be a stout, muscular, short-necked, young woman, apparently three or four and twenty years of age, lying on a bed in a state of unconsciousness. Her mouth and lips were besmeared with blood, and her looks seemed vacant and unnatural. It was stated that she had had lingering pains during the previous day and night, and that up to an hour before she was suddenly struck down in the first fit, she had not given any manifestations of any particular symptoms; she then complained of headache, which became more violent, and speaking of this a few moments before she fell down, she described it as being so intense that she felt as if her head were "opening and shutting." Two hours before this occurrence the pains were strong and much more powerful than they had been; they then almost entirely ceased. She had had four fits before my arrival, and during the intermissions she was scarcely, or not at all, conscious of what was passing around, or of her own condition, and tossed about the bed in a furious manner. Immediately after I had entered the room another paroxysm came on; the eyes became everted, the countenance greatly congested, the hands powerfully clinched, and the whole frame convulsively shook in the most alarming degree, whilst the foaming at the mouth, stertorous breathing, etc., added to the grave character of the scene. Her agitation and continuous efforts to throw herself off the bed were so strong that it was with difficulty that she could by two or three persons be restrained. The features quickly became darker, and the attack continued for a considerable period. After the fit had terminated the body was raised in the semi-erect position, thus favouring the return of blood from the head. I then, as she was now somewhat tranquil, opened a vein in the arm by a large orifice, and at once abstracted no less than thirty-five ounces of blood. The pulse before bleeding was full and bounding, and increased in frequency. On introducing the hand the os-uteri was fully dilated, and the membranes entire. Snow being on the ground, this was constantly applied to the head, and a thorough perflation of fresh air emitted through the apartment. Appearing now somewhat easier, the breathing being performed with less difficulty, I decided at once on delivery. The hand was carefully introduced, and the child turned and born in from twelve to fifteen minutes. Thirty drops of laudanum were then given, and the head ordered to be shaved immediately. She continued in a tolerable state of composure for four hours, at intervals having a short sleep, during which she would murmur in a low muttering delirium, and on suddenly awaking would distressingly mourn, roll her eyes, and speak in a quick incoherent manner, frequently changing her position in bed, and strenuously endeavouring to get up.

7 a.m. Another violent paroxysm came on characterized by the same symptoms as the former. On the termination of the fit the following treatment was pursued:—

Venesection to twelve ounces. R. Calomel., gr. viij.; Pulv. Opii, gr. ij. Sit pulvis statim sumendus. Empl. Lyttæ nuchæ. Sinapismi cruribus et spinæ lumborun. Hirudines xii. temporibus. Enema Terebinth. in Decoct. Amyl. Oiss., statim injiciend. Snow continued to the head.

4 p.m. No return of fits since this morning at seven o'clock; tossed about for a short time, when she became quiet, and slept three hours; on awaking appeared to be partially sensible; skin moist; pulse 90; injection came away mixed with a copious quantity of fæculent matter; tongue swollen, and somewhat besmeared with blood.*

R. Tinct. Opii, gtt. xxx.; Aquæ, oz. iss. Sit haustus hora somni sumendus.

3rd. No return of fits; slept pretty well during the night; bowels opened; tongue moist; skin rather hot, and complains of headache; is quite sensible; pulse 86; blister rose well; has some pain in the inferior abdominal region; answers questions more coherently, but is not quite sensible.

R. Pulv. Jalap. Co., scr. ij.; Syr. Rhæad, dr. ij.; Sp. Ammon. Co., dr. ss.; Aquæ, dr. x. Sit haustus statim sumendus.

R. Liq. Ammon. Acet., oz. iss.; Spr. Æth. Nitr., oz. ss.; Mist. Camph., oz. iv. Sit mist. Capt., oz. j., quarta quaque hora.

4th. Does not feel quite so well to-day as yesterday; head aches, and complains of severe pain in

* Of course the requisite precautions were taken immediately on my arrival to prevent injury being done to this organ during the fits. The midwife who had been in attendance had omitted this, and indeed so ignorant was she of the nature of the affection, that she stretched the patient on the floor, expecting it was simple syncope. It is high time these incompetent practitioners had their functions suspended.

abdomen; countenance of a yellowish tinge; pulse 84; skin moist, and has sweated a good deal. Bowels well opened by draught; no lochial discharge; tongue moist and on the whole is going on favourably. Intellectual faculties much more natural.

5th. Had a better night, having slept for some hours consecutively; tongue moist, and skin not at all dry; pulse 88, tolerably soft; complains of less pain in head; no uneasiness on pressure over abdomen.

R. Infus. Calumb. Ten., oz. viij.; Sol. Morph. Mur., dr. j. Sit mist. Capt., oz. j. ter die.

7th. To-day, at 1 p.m., was hastily sent for, another fit having come on. On my arrival the paroxysm had terminated, and she was then sensible. From the accounts of the attendant, this attack had been of a milder character. Reported to have complained of some headache yesterday; bowels open; tongue moist; skin rather hot but not dry, and still complains of pain in the head. Venesection to six ounces, which induced syncope.

R. Pulv. Opii, gr. ij.; Calomel., gr. vj. Sit pulv. statim sumend. Sinapimi cruribus. Mistura omittatur. Ol. Ricini post horam.

7 p.m. Continued easy since last visit; no return of fits and has slept three hours.

8th. Slept well; bowels open; urine plentiful. Is in all respects better.

10th. Continues much the same, but does not sleep very well and complains of some beating at the heart.

Mist. cum Infus. Calumb. sumatur.

14th. Says she cannot sleep, and for some days has not slept three hours consecutively. Has pain over the os frontis, which is described as a dull headache. Action of heart on application of the stethoscope is excited, but no bruit can be heard. Pulse 80, of tolerable strength.

R. Tinct. Digitalis, gtt. xl.; Sol. Morph. Mur., dr. iss.; Aquæ, oz. iv. Sit mist. Capt. quartem partam omni nocte

15th. Slept well last night. In all respects improving.

17th. Rapidly improves.

24th. Convalescent.

Remarks.

There is not an affection more alarming, nor one in which promptness and energy are more imperatively demanded, than an attack of puerperal convulsions. Procrastination in our measures, and an imbecile line of treatment, are often attended with disastrous results; whilst a ready decision, and the bold employment of those means which, with the well informed, have now become indisputably established, can in a great majority of cases avert a mortal termination. Before this disease was so well understood as it now is, not more than one half or one third recovered. In the seventeenth and eighteenth centuries, it was regarded by the physicians of those times as a well-nigh always fatal disease. Hunter, Jacobs, and others affirmed that more than fifty per cent. invariably died, indeed, they considered it as one of the most fatal of complaints. Comparing such statements and the degree of mortality with the present notions of the affection, and the ratio of deaths that now occur, under different pathological views and a more fearless mode of treatment, we are impressed with the complacent reflection that the progress of science, and the valuable truths arrived at by careful observation, have in this complaint been followed with the most valuable results, and that such have tended to the prolongation of human existence.

Puerperal convulsions usually occur during one or other of the stages of labour, or immediately after parturition. They may also come on at any period during the latter half of pregnancy; such, however, is far more rare than the former. The most frequent of all times is undoubtedly a little before the termination of the first stage, when the os uteri is becoming fully dilated. This affection may also take place at any period within the first twenty days after labour, but such is more uncommon, for after the uterus has expelled its contents, and so long a time as ten days or a fortnight elapsed since delivery, the supervention of the convulsive paroxysms is but seldom noticed. In the instance of this person it is seen that the first fit came on immediately before the os became fully expanded; and it is also worthy of remark, that five days after her delivery another fit came on, although there was no return of the paroxysms from the period of parturition to that time. With regard to the dilatation of the uterine orifice, I am aware some authors have affirmed that a fit will supervene when scarcely any signs of labour are present, and in a few minutes after such fit, not only will the parts have become sufficiently dilated, but the child be immediately born, owing to the morbid excess of muscular action. Such statements may be regarded as an exaggeration rather than as a simple declaration of facts, for it will generally, if not always, be observed, that where the fœtus is so precipitably expelled, the os had some time before been gradually becoming patulous.

It may here, too, be mentioned, that the affection is much more common in primiparous females, than in women who have previously borne children. Ann W. had never before been confined. In four cases which I have known, three were in the first confinement. Collins, in an account of thirty cases, says that twenty-nine were first births; and of thirty-six by Merriman, twenty-eight were first births. We can readily conceive that the first time nature accomplishes this process, her efforts will have a more severe effect upon the animal economy than when the parts have been previously distended, the impression made upon the nervous system give rise to greater excitation, and the mental disturbance which ranks amongst the acknowledged causes exert a more powerful influence upon the body.

Pathologists have found it difficult to determine which are really the remote and which are the proximate causes; indeed, on this head there exist much

ambiguity and difference of opinion. Amongst the remote causes, however, with those who endeavour to define certain conditions as such, irritation transmitted to the great nervous centres by means of the afferent spinal nerves, especially those proper to the uterus, which, from their morbid excitation produce the sequent train of phenomena at the base of the brain and in the spinal cord, may be enumerated as importantly entering into the causation. Irritation in any portion of the alimentary canal, particularly in its gastric course, preternatural vascularity in the colon, a diseased state of the liver, of the bladder, etc., have been considered as likely to induce the affection. There can be little doubt that a previously confined and irregular state of the bowels, the accumulation of scyballous and acrid matters, &c., will act as powerful predisponents. Morbid conditions existing in the nervous centres themselves, as well as from states operating upon the extremities of the incident nerves, might also be mentioned. There can be no doubt whatever that mental discomposure acts very importantly in the induction of the convulsive paroxysms. An anxious and depressed state of mind always exerts a deleterious influence upon the body, and renders the nervous system morbidly excitable, and where such obtains to a considerable extent, or has been long continued, it may readily be imagined that such would be apt to induce the results considered. In four cases which I have known, in three there was much mental disquietude. One was the lady of an officer in the army, whose husband died very suddenly about the period of her full time of pregnancy; labour came on, accompanied with very violent convulsions. The two others were unmarried females, and had both, for some time before, been very despondent. It has been stated by eminent obstetricians, whose experience in this disease is more ample, that it occurs far more frequently in illegitimate births than in the confinements of married women,—an assertion which is very likely to be correct, owing to the acute sense of shame in the former, the censure of their friends, and other gloomy reflections which have often considerable effect. The state of the air by some, especially the older physicians, has been deemed an essential element entering into the causation of puerperal convulsions. There can be little doubt that they are more common in summer than in winter, and when the air is surcharged with electricity; yet they are much more dependent upon more potent causes, and may occur at any season of the year, and under every variety of temperature. This case it is seen was in the month of February, and I well recollect it was a keen frosty night. Dr. Ramsbotham says that the affection is most usual when there is thunder in the air,—an assertion highly probable, and in this respect being analogous to what we know with regard to apoplexy, to which disease puerperal convulsions are very nearly allied.

Puerperal convulsions appear to be proximately caused by two distinct and opposite conditions of the vascular system,—viz., an over-distension, and a too great emptiness of the blood-vessels, because we know that the cerebral vessels being over-loaded in a patient of plethoric diathesis, by producing pressure on the brain, will give rise to the paroxysms; and also when there is sudden and considerable loss of blood, as in uterine hæmorrhage, because convulsions often precede the fatal issue, and they have been experimentally produced in the lower animals by sudden and copious venesection.

It is more difficult to account for their occurrence when exsanguination, than when plethora, is regarded as the cause. The manner in which the result is produced may probably be owing to the equilibrium of the circulation being lost by a sudden effusion of the vital fluid, when the walls of the vessels have not sufficiently accommodated themselves to the decreased volume of blood traversing their cavities; hence their propulsive power would become in some measure impaired, and thus congestion and pressure ensue. We know that the heart requires an exact volume of blood to be transmitted through its cavities during each systolic and diastolic action, and unless such volume be normal, its action will become altered, and this change of function of course exerts a commensurate effect throughout the vascular system, When therefore the column of blood is considerably decreased, the organ is not stimulated to its ordinary degree of contractile power, the vis a tergo is diminished, the propulsive functions of the larger vessels are also impaired, and congestion at the vascular extremities is thus engendered, whilst the whole system partakes of the debilitated condition, and thus superadds to the first cause.

There are two descriptions of patients, whose conformations are exactly opposed to one another, with whom the disease appears chiefly to prevail—the muscular, short-necked, apoplectic-looking person; and the thin, slender, nervous female, of highly-excitable temperament and hysterically inclined. Mr. Cole, of this place, not very long ago attended a young person of this description, who had the convulsions in the most alarming manner. These being admitted as the most correct views of the radical pathology,—viz., that pressure, however remotely induced, is produced in the nervous centres, yet *post-mortem* investigations have not satisfactorily elucidated such conclusions, because autopsies have been made where the patient has died of puerperal convulsions, and no organic changes have been observed to follow, or in any degree account for death, just as in cases of apoplexy, termed nervous or simple apoplexy. It seems rational to suppose that radical organic changes do exist in all cases, but in particular instances they are certainly so occult, as in the present state of our knowledge to elude detection.

The case now given was of the eclampsial kind, which, according to Burns, occurs in ninety-nine cases out of every hundred. Sauvages defines the genus Eclampsia as follows:—"Artuum vel musculorum plurimorum, spasmus clonicus acutus, cum sensuum obscuratione."

It must be granted, that between puerperal convulsions and apoplexy there is a striking similarity, and some consider the two affections strictly identical, but when carefully compared they are not so, neither in their phenomena during the paroxysm, nor in the effects which follow. In their causes they appear very nearly allied. Apoplexy differs from this species of convulsions because in that disease there is never such violent agitation of the voluntary muscular system, and because in the one paralysis very generally succeeds, whilst in the other it almost never follows. From epilepsy it differs, because puerperal convulsions rapidly succeed one another, while in epilepsy it is not the case. Again, there is no aura epileptica, and they seldom ever return during the remainder of life.

On reference to the above case, it is said that immediately preceding the fit, an intense pain in the head was experienced, according to the patient's own words, as if it were opening and shutting. Scintillæ, muscæ volitantes, or a fit of shivering, are often the premonitary symptoms. Occasionally there is an incoherent rambling of expression, but more generally little if any intimation is given. If the patient should, however, manifest any evidence of their supervention, as by complaining of a sense of weight in the head, or dizziness, accompanied with spasm in any part, we should at once be on our guard.

(*To be continued.*)

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

Reported by PETER HINCKES BIRD, formerly Resident Medical Officer.

CASE I.

FOREIGN BODY IN THE TRACHEA; TRACHEOTOMY: RECOVERY.

Mary Ann Priestly, aged 5 years, admitted into the Queen's Hospital on the afternoon of July 19th, 1847. It is stated that about half an hour ago she swallowed a glass bead; she was sucking it, and on taking an inspiration, it disappeared. When admitted she was without any urgent symptom, but complained of pain referred to just below the cricoid cartilage, and of "*something being in her throat*;" a probang was introduced into her stomach, and she was made to vomit, but without relief. On applying a stethoscope to the trachea, a foreign substance was heard to move up and down during the respirations, and on making a strong expiration, it seemed to strike against the rima glottidis. In the evening the pain shifted lower down, and to the right side, and on applying the stethoscope the body was not heard moving up and down the trachea, but appeared impacted in the right bronchus. The vesicular murmur was less heard in the right than in the left lung. The inspiration also had a blowing character.

20th. She passed a pretty good night, and slept well, but on awakening was seized with a violent fit of coughing; she feels pretty well; appetite is good, and she eats heartily.

5, p.m. After a consultation, tracheotomy was decided upon, and performed in the following manner, by Mr. Knowles:—An incision was made, of about two inches extent, commencing just below the cricoid cartilage, and the soft parts covering the trachea were divided; this was followed by considerable venous hæmorrhage, and the thyroid gland projected from the upper part of the wound. The trachea was so small and so deep, that the operation for opening it was by no means easy; but after the hæmorrhage had ceased, it was done, and after two expirations the bead flew out with considerable velocity. The child bore the operation with remarkable *sang froid*. After waiting a short time untill all bleeding had ceased, the edges of the wound were brought together by straps of adhesive plaster. The bead was composed of glass, was hollow, and narrowed and open at both ends. The child appeared much lowered by the operation; her face was pale, and pulse weak. There was towards the evening some mucous râle attending the respiration, but on applying the stethoscope it was found not to occupy the bronchi but the posterior nares.

On the 21st there was some slight croupy cough, attended with febrile symptoms, which were relived by appropriate treatment. On the 22nd the air ceased to pass through the wound, and on the 29th she was convalescent.

CASE II.

REMARKABLE GUN-SHOT WOUND: RECOVERY.

John Smith, aged 29, boatman, was admitted into the Queen's Hospital, under the care of Mr. Knowles, on the morning of the 9th of August, 1847. He states that about half an hour ago he was stooping down to pick up a gun; the mouth of the barrel was pointed towards him and close to his chin; the lock of the gun caught against something, the gun went off, and discharged its contents in his neck. He was not stunned, nor did he lose much blood. The gun was charged with shot and paper wadding.

On admittance, his countenance was pale and towards the lower part smeared with powder. There was a large wound a little to the right of the median line just below the ramus of the jaw; it was uneven and lacerated, and would contain about four of the fingers, it was also much blackened by the powder. The wound extended backwards and a little inwards, below the ear, to midway between the ear and occipital protuberance, but below them, and terminated by an irregular triangular opening, of about one inch in extent, having everted edges, from which the charge had issued. There was fortunately no large artery wounded; the external carotid artery had a very narrow excape, and could be seen beating on the inner side of the wound. The wound was well probed, but there was no wadding or other foreign substance discovered.

The parts about the wound to be shaved; lint dipped in tepid water to be applied to the wound, and a bread poultice at night.

10th. Complains of much headache when raised in bed. A small shot came away in the poultice last night. Pulse 66, strong.

12th. Complains of occasional headache; feels low; wound discharges a very fœtid pus. Bread poultice. As there was much apprehension of ulceration of the carotid artery, an assistant was in constant attendance on him.

14th. Feels low; no appetite; pulse 72; wound discharges very freely. To be dressed with water dressing, and to be injected three times a day with tepid water. Beef tea, broth, &c.

17th. Feels much better; appetite improving; pulse soft and regular, 66; the wound looks very healthy, and is granulating. Mutton chop and porter.

23rd. Doing well; wound is rapidly healing; pulse soft and regular; bowels open; appetite good; tongue clean.

Sept. 1st. Wound nearly healed. Convalescent.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, NOVEMBER 3, 1847.

We have barely room in the present number for a very brief allusion to the meeting of Union Medical Officers, which took place on Wednesday last, at the Hanover Square Rooms. As far as the proceedings are concerned, it is scarcely more than necessary to refer to the report which we give elsewhere. It is sufficient to say that the meeting itself was a highly satisfactory one, most respectable in its character, and considering the time of year, the prevalence of sickness in many parts of the country, and the wide distances which a very large number of those interested had to traverse, far more numerously attended than could have been anticipated. Satisfactory, however, as was this meeting, we quite agree in the opinion that a single meeting will not do the work. That which has just been held can only be considered as breaking the way. The entire subject must now be well sifted, and the necessary information in all it branches collected and digested. Statistical facts and records such as have been already furnished by Mr. Garlick, of Halifax, and other gentlemen, must be generally sought for and obtained from all parts of the country. It will, however, be the duty of the intelligent Committee appointed at the meeting, to draw up instructions adapted for the attainment of the objects in view, and to suggest to the profession that course of action best calculated to bring the question to a successful termination. We have no doubt they will soon be in active operation, and earnestly do we hope that a reward, commensurate with the exertions which we feel assured they will bestow, may speedily crown their efforts.

Proceedings of Societies.

BATH PATHOLOGICAL SOCIETY.

Sixth Meeting.—March 1st, 1847.

Mr. NORMAN in the Chair.

CASE XXVI.—*Ossified Gall-Bladder.*

Mr. Bagshaw exhibited an ossified gall-bladder. The individual from whom the specimen was taken was a woman about seventy years of age. There had never been any particular symptoms referrible to the liver, except occasional bilious vomiting; the secretion of bile had always been abundant, and the appetite for food at times craving. The coats of the gall-bladder were from an eighth to a quarter of an inch in thickness, and contained throughout an abundant deposit of calcareous matter, except at one or two points, where the deposit had not taken place. The gall-bladder contained a quantity of yellowish white pasty-looking matter, which yielded about forty per cent. of cholesterine. Mr. Bagshaw remarked on the case, as being one of considerable rarity.

CASE XXVII.—*Acute bronchitis, with great difficulty of breathing, at times amounting to orthopnœa; apparent recovery; sudden death.—Dissection: Apoplexy of the lung, with rupture of the pleura, and escape of blood into the pleural cavity.*

Dr. Edwards exhibited the right lung of a man who had died of pulmonary apoplexy, under the following circumstances:—The man was sixty-three years of age, and was first seen by Dr. Edwards on the 22nd of last January, having been previously under medical treatment for an attack of acute bronchitis, which appeared to be subsiding, though he still laboured under great difficulty of breathing, at times amounting to orthopnœa, distressing cough, and copious expectoration. In about a fortnight all his bad symptoms in a great measure left him, and he began to recover strength until the 19th of February, when he was, according to his own expression, "quite recovered." He had lost all cough and difficulty of breathing for seven days; had slept well, with his head low; his bowels were regular; tongue clean; appetite good; pulse soft and regular, 76 in the minute. His chest was not examined at this time by means of auscultation and percussion. On the following morning his wife left him a little before eight o'clock, as well as usual, having passed a good night. On going to him three quarters of an hour afterwards, she found him pale, almost speechless, and unable to raise his head from the pillow. About an hour after this he appeared to rally a little, and swallowed a few tea-spoonfuls of beer, after which he became still further depressed,

his heart beat violently, and he sank gradually a little before six o'clock of the same day.

On examination, about sixty hours after death, the abdominal organs were found healthy, the liver and kidneys slightly congested. On opening the thorax the right lung was found firmly adherent to the costal pleura and diaphragm, the adhesions having an almost fleshy aspect; the right pleural cavity contained about a pint and a half of fluid blood; the lung was emphysematous to a considerable extent; the trachea contained a good deal of muco-purulent-looking matter; the bronchial tubes were empty, and the lining membrane healthy. At the middle of the upper lobe, at the outer side, there was a ragged opening, about an inch in length, through the pulmonary pleura, leading to a cavity, about three inches in diameter, which contained some fluid blood, and also a small coagulum; the contiguous portion of lung was indurated, with a distinct line of demarcation between the diseased and healthy structure; on making an incision into the diseased part, it was found of a deep red or nearly black colour, granulated and homogeneous. The left lung was slightly emphysematous. The heart was nearly natural; on the right side the cavities seemed slightly dilated, and on the left side the auriculo-ventricular opening was somewhat contracted; the valves were sound.

Dr. Edwards remarked on this case as presenting some points of interest—first, that for seven days before the man's death he appeared to be going on well, having lost his cough and dyspnœa, and gained strength; and observed from this, the propriety of making a physical examination of the chest before pronouncing the lungs sound after they have been the seat of serious disease. The author then remarked on the nature of the case, that it was one of hæmoptysical engorgement, in which the blood became effused into the parenchyma of the lung, coagulated in the vesicles in such a way as to form an intimate union with the pulmonary tissue; the effusion continuing, the extravasated blood seems to have broken down the pulmonary substance, and at length, on the morning of the day on which he died, the pulmonary pleura gave way, and blood became effused into the cavity of the chest. The reason of the man's death not being sudden, obviously was the resistance offered to the flow of blood by the pleuritic adhesions. Dr. Edwards referred to similar cases related by Corvisart and Andral, and concluded his remarks by pointing out the pathological distinctions between pulmonary apoplexy, the induration of pneumonia, and the congestions which take place after death.

Case XXVIII.—*Extensive cardiac disease, a sequel of acute rheumatism; general anasarca; death.—Dissection: Diseased aortic valves, and an hypertrophied heart.*

Case XXIX.—*Difficult breathing; irregularity of the heart's action, with a bruit; pneumonia; death.—Dissection: The middle and lower lobes of the right lung hepatized; enlargement of the heart; mitral orifice greatly contracted, apparently congenital.*

Dr. Cardew exhibited two hearts. The first was taken from the body of a lad about 18 years of age. When first admitted under the care of Dr. Cardew, about a week before death, he was suffering under much difficulty of breathing, with general anasarca, obviously resulting from extensive obstructive disease of the left side of the heart; percussion gave a dull sound over a larger space than natural, and both sounds were marked by a distrinct bruit. The affection of the heart seemed to have followed an attack of acute rheumatism.

On dissection, the heart was found greatly enlarged, especially the left ventricle; the pericardium was not adherent, the disease having been confined to the endocardium. The aortic valves were thickened and contracted, and quite incompetent for their office.

The second case was that of a lad, about 17 years years of age, concerning whom a very imperfect history was all that could be obtained, in consequence of mental incapacity. He suffered from great difficulty of breathing, with irregular action of the heart. On examination there was heard a distinct bruit accompanying the first sound. During the time he was in the hospital, he was attacked with pneumonia of the right side, from the effects of which he died.

On dissection, the middle and lower lobes of the right lung were found hepatized; the heart was somewhat larger than natural, in consequence chiefly of dilatation, as the walls did not appear increased in thickness; the aortic valves were healthy, but the auriculo-ventricular orifice on the left side was so narrow as scarcely to admit the passage of a large quill; the absence of all appearance of inflammation around the contracted opening led to the opinion that the case ought to be considered as one of congenital defect, and not as the result of disease.

Case XXX.—*Secondary syphilis; cachectic condition of the system; pain in the right hip; cerebral symptoms of a comatose character; death.—Dissection: Extensive disease at the base of the brain, believed to have had a syphilitic origin.*

Mr. John Soden exhibited a portion of the brain of a young woman, concerning whom he gave the following account:—The patient was a young woman, about 24 years of age; she had been admitted into the Bath General Hospital about a fortnight previous to her death, in a very cachectic and debilitated state, on account of chronic pain of obscure seat behind the right hip, and for which she had been several months during the summer in the Bristol Hospital. There were also a few partially-healed ulcerations of rupia on the body. A few days after her admission, cerebral symptoms showed themselves, which at once assumed a comatose character, and continued without variety or indication of any particular local lesion for ten days, when she died. Throughout the whole of the time she remained in a state of nearly complete insensibility, powerless and unobservant of external objects, but just capable of being roused to reply to questions.

On dissection, the disease of the brain was found to be confined chiefly to the base, and the crura cerebri and pons Varolii were the parts most affected. The disease appeared in the form of distinct opaque and thickened patches in the arachnoid, underneath which

were effusions of a dusky yellow colour, separating the membranes from the brain. The structure of the brain itself was also of a darker colour than natural at these points, and softened, so much so that the greater part of the left crus cerebri was broken down. In the earlier stages the diseased portions appeared indurated and of a dark colour.

Nothing was known of her previous history but that she was a sempstress, and a native of Bristol; her position was supposed to be respectable, and from the character of her connections, she could not have been in a very destitute condition. However, the *post-mortem* afforded abundant evidence, independent of the rupia, of the syphilitic taint; one groin was extensively cicatrized, and the orifice of the vagina filled with soft granulations, covered with purulent discharge.

Mr. Soden observed, that Dr. George Budd had published in the *Medical Gazette* several cases illustrative of disease of the brain, occurring in syphilitic subjects, and the fact of their coincidence and probable connection is believed by several of the highest authorities in the profession, but direct evidence from dissection has been hitherto wanting. As far as this single observation may be trusted, it would appear that secondary syphilis, in attacking the brain, maintains the type of an eruptive disease there, as it does in the skin. It must, however, be admitted, that the symptoms of this case differed greatly from those narrated by Dr. Budd, which were more chronic, and attended by paralysis; they were also slight in character, and not fatal, at least during the time they were under Dr. Budd's observation. Mr. Soden did not wish to lay too much stress on the appearances in this case in support of the view he had suggested, but thought it worthy of being brought before the notice of the Society.

CASE XXXI.—*Dyspnœa; lividity of countenance; physical signs of the advanced stage of pneumonia of the right side: death.—Dissection: Right lung presented the second and third stages of pneumonia.*

Dr. Davies exhibited the right lung of a man, 38 years of age, whose history was as follows:—About four years before his present attack, he suffered from inflammatory disease of the chest, for which he was bled, cupped, and blistered; previously to that time and since he had enjoyed good health. His present illness commenced ten days before his admission into the hospital, at which time he was seized with rigors, followed by sweating, afterwards with considerable pain in the right side of the chest, and difficulty of breathing; his cough was trifling, expectoration not much, and no blood as far as he had observed. On admission, his countenance was somewhat livid, and expressive of anxiety and exhaustion. His position in bed was on the right side, with the head and shoulders much raised. On making an examination of the chest, the whole of the lower and posterior part of the right side was found dull on percussion; on applying the ear over the same region, there was heard an abundant moist râle, the bubbles being of a rather large size; in the infra and supra-spinous regions there was little audible, except loud tubular blowing; the left side of the chest sounded naturally on percussion; the respiratory murmur was clear, except an occasional moist râle; the sounds of the heart were natural. The pulse was 132, vibrating beneath the finger, but without much power; respirations 52 in the minute; the tongue dark-coloured, glazed and cracked; bowels confined. The morning following his admission into the hospital he died, no change in the symptoms having taken place.

Examination thirty hours after death. On laying open the thorax, the whole of the right lung was found adherent to the costal pleura by firm old adhesions, probably coincident, in point of time, with his illness four years previously. The entire lung, with the exception of the apex, and a portion of the external border, was in a state of complete condensation, the lower part of the upper, and the whole of the middle lobe being in that state described as red hepatization, inferiorly passing into the third stage, or that of softening, whilst the lower lobe had already attained that condition, a section presenting a dirty yellowish-brown colour, and yielding, on compression, a quantity of dark-coloured purulent matter. The left lung was slightly adherent; at the apex emphysematous to a considerable degree, but otherwise healthy. The other viscera were natural, with the exception of being congested.

SHEFFIELD MEDICAL SOCIETY.

Seventh Session.—First Meeting, October 8th, 1847.

Mr. TURTON in the Chair.

Mr. Ray was elected President.

Messrs. Law and Skinner were re-elected Secretaries.

It was resolved unanimously,—

"That it is the duty of the members of this Society, at the first meeting of the present Session, to, convey to Mrs. Storrs, of Doncaster, a respectful expression of their heartfelt regret for the loss which she and they have sustained in the death of Mr. Storrs, a most active member of the medical profession, and a valuable corresponding member of this Society; and that they humbly trust that Mrs. Storrs will receive consolation under her sad and painful bereavement, from that good Providence, to whose inscrutable dispensations all must submissively bow."

The meeting was then adjourned.

Foreign Department.

ANALYSIS OF A MEMOIR ON STRICTURE OF THE URETHRA.

By M. REYBARD, of Lyons.

(Translated for the Provincial Medical and Surgical Journal.)

Although during the last few years many interesting communications on the subject of urethral strictures have been produced, it cannot be affirmed that any marked advance has been made in their treatment. The author of the present communication has studied these affections under a new point of view, and considers that he has contributed much new and valuable information respecting them. He goes so far even as to say, that the method which he has to propose is the only really curative one. In making

this assertion, he does not disguise the fact that the novelty of his ideas respecting the pathogeny and therapeutics of the urethral stricture may render them difficult of acceptance, but he trusts that the good faith with which they are propounded, and the care with which his experiments on animals have been performed, will give him considerable claims to a patient hearing.

In the succeeding portions of his memoir, the author enters upon—first, the causes of stricture; secondly, the pathological anatomy; and thirdly, the treatment.

Among the causes of stricture, he considers separately, inflammation and injuries, inasmuch as he conceives that their mode of action is widely different.

I.—Causes of Stricture.

Inflammation of the Urethra as a Cause of Stricture. In speaking of stricture, as succeeding inflammation of the urethra, the author advances a new theory, which he believes to be worthy of attention, as suggestive of important practical consequences. He declares for instance, that urethral inflammation does not induce stricture by leaving the parietes of the canal in a state of engorgement and induration, as is generally believed, but that the inflammation operates by inducing a degeneration of the affected tissues, and converting them into a stricture, which, up to a certain point, remains extensile, but subsequently becomes rigid and inelastic. This theory he promises to elucidate more fully in a subsequent part of his essay.

Stricture, as produced by Solution of Continuity.—The author is the first who has made the influence of traumatic lesions in the production of stricture the subject of direct experiment: this he has done upon dogs and other animals to a great extent. Many forms of injury are, he states, not susceptible of inducing stricture, though all have been thought capable of so doing, under the impression that cicatrices ensue from the wound, and these cicatrices, as in other parts, are followed by contraction. This the author shews to be an erroneous opinion.

In order to distinguish those forms of injury which induce stricture from those which do not, he divides them into three categories, and has recourse to experiments to decide the extent and mode of action of each. In the first category he ranges all ulcerations of the urethra, whether succeeding inflammation, cauterization, or other loss of substance, or whether induced by gangrene. In the second, he places injuries by cutting and laceration of the urethra; in the third, those solutions of continuity which are the consequence of contusions and rupture of the corpus spongiosum.

Ulceration.—The result of the author's experiments is, that the cicatrices which follow ulceration of the urethra determine stricture by destroying the elasticity of the old tissues, and also in virtue of the contractility of the new. For this reason he condemns cauterization as a remedy.

Wounds by incision.—The author has also instituted numerous experiments on animals, for the purpose of ascertaining the influence of wounds by cutting instruments. He divides these wounds into longitudinal and transverse, the latter including also those induced by laceration, by torsion of the penis, careless catheterism, &c. After proving that transverse wounds induce contraction of the canal, he shews that longitudinal incisions, instead of having the same effect, tend on the contrary to enlarge its calibre. From this fact he was led to the treatment of stricture by incision.

II.—Pathological Anatomy of Stricture.

Much attention has of late years been paid to the morbid anatomy of urethral strictures, but although examination has demonstrated that they consist of fibrous or fibro-cartilaginous tissue, the formation and properties of this tissue are still undescribed. Thus it is generally believed, that strictures are composed of a tissue susceptible of resolution, and the therapeutical influence of bougies, &c., is supposed to depend upon their power of exciting absorption. This theory the author affirms to be untenable, if his views of the nature of the anormal stricture be received. He supposes that the new tissue is fibrous, both in recent and in old strictures, because it appears to him impossible that the inflammation can give rise to an organized tissue at once. The tissue is sometimes extensible and retractile at others altogether rigid. The former properties belong only to recent strictures; those of old date are always in the latter condition.

Following up this idea that urethral stricture is at all periods composed of a tissue of transformation, and that the only difference between the recent and the old is the degree of organization of their parietes, the author declares that they cannot be cured by dilatation, which is at best but a palliative measure. What the treatment is which he considers most successful, he next proceeds to describe.

III.—Treatment.

The cure of urethral strictures is attempted principally by the three means of dilatation, cauterization, and division by a cutting instrument, or urethrotomy. Before he speaks of these measures, the author premises that he acknowledges those cases alone as cured, in which the canal of the urethra has been permanently restored.

Dilatation and cauterization are passed over by the author as unworthy of the least confidence as regards a permanent cure; the latter in particular, he has proved by experiment, to be a powerful means of producing the very lesion it is intended to remove.

Urethrotomy is the term used to signify the division of the parietes of a stricture in the urethra. The operation is performed under various modifications. According to one method, dilatation is the main agent, and the scarification is considered as a subsidiary measure; by the other method or that of incision, the division of the stricture is the principal agency.

Scarification is a complex measure, because it is always necessary to associate with it the use of sounds, for the purpose of dilating the incised parts. Scarification is not a new method of treating these accidents, but the instruments which were formerly used rendered the operation so dangerous, that it was all but abandoned, when M. Amussat revived it with the assistance of

more perfect instruments. From this time it became a favourite method of treating stricture, and many surgeons have invented new or modified existing forms of scarificators. The author considers it would be a waste of time to describe these various instruments; but remarks solely that none of them are fully capable of effecting what is required of them, as they do not cut through the entire thickness of the morbid tissues.

Although scarification can only be considered as auxiliary to dilatation, it has numerous partizans among those who consider that a stricture is cured when the canal readily admits a sound of large dimensions. The author was at one time one of these adherents, but since he has regarded those strictures only as cured which cannot be reproduced, and has noticed that those which he has removed by scarification, returned as readily as those treated by dilatation alone, or by cauterization, he has abandoned the operation as far as its association with dilatation is concerned, and has recourse to deeper incision, as the sole operative proceeding. His method of operating, together with the instruments employed, are thus described by him:—

The *urethrotome* most used by the author, is one which he has recently devised, which consists of a canula in the shape of an ordinary sound, a handle and a blade. The canula is formed of the straight portion of a catheter, which is sometimes finished off with a button, at others with the ordinary curved portion of the instrument. It is cleft on the right side through three fourths of its length; and in this cleft the blade is made to play. The handle or rod which works the blade is of a diameter sufficient to fit the canula, and consists of two straight pieces of steel, which at the inner end move on the principle of a cog and wheel. One of these branches which is slightly larger then the other has the blade attached by a spiral screw, and presents a grove behind this, in which a button-like projection of the other branch is made to glide. At the upper extremity of this branch, a screw traverse is attached, in which a nut moves, by which the instrument is opened. The blade as has before been stated, is fixed upon the larger branch of the handle, by a spiral screw. This blade can be made to project an inch if necessary, at the same time preserving such an inclination as to render the division of the stricture a matter of facility. It is made to project and to re-enclose itself in the canula, by appropriate movements of the screw apparatus at the head of the handle.

The advantage of this instrument, which, however, cannot be well described without the assistance of a drawing, is said by the author to consist in the fact that it does not cut in the act of withdrawing the canula, as is the case with other urethrotomes, but that its action takes place while the instrument remains in the urethra, and the parts are consequently in a state of tension.

The operation itself has three stages—1st, the introduction of the instrument beyond the stricture; 2nd, the action of opening it; 3rd, the division of the parts.

Before passing the instrument, its length is apportioned to the depth of the stricture, and the necessary extent to which the blade is to project is arranged; the canula is then introduced. To open the instrument, the branch of the handle which lifts the blade is drawn out as far as the regulating nut. In this movement the blade is made to project from the canula to the intended degree. The penis is then stretched along the canula, so as to give the necessary tension to the walls of the urethra. The division of the stricture is then made by withdrawing the handle for a few lines; this being done, it is again depressed, and a second time withdrawn for a space of two inches. By this the urethra is divided through its entire thickness, and the canula is withdrawn.

In order to prevent the agglutination of the incisions by firm inextensible cicatrices, which would only increase the evil, the author advises that a sound should be passed once or twice a day. The keeping a sound in the urethra until cicatrization has taken place, he considers bad practice, as by inducing suppuration of the wound it tends to cause the formation of a more extensive cicatrix.

[It appears from the above account of the operation, that it differs from others in the extent to which the incision is carried, this being not merely through the condensed substance of the stricture, but involving also the healthy subjacent tissue of the urethra. This is, according to the author, a necessary condition to success. Our surgical readers will be the best judges of the value of the operation, which were it not for the appearance of deep consideration given to it by actual and numerous experiments, we should denounce as an unnecessarily severe proceeding.]

GENERAL MEETING OF POOR-LAW MEDICAL OFFICERS.

A meeting of medical officers of Poor-Law unions, with a view to an amelioration of the present system of Poor-Law medical relief, was held on Wednesday, October 28th, at the Hanover-square Rooms. There were present about 200 gentlemen from various parts of the kingdom, most of them being deputed also to represent the medical men of their neighbourhoods on the occasion.

Dr. Burton, of Walsall, having been called to the chair, proceeded to open the business of the day. The subject that was to occupy the attention of the meeting was one possessing much public interest in its most important bearings. The gentlemen present were members and representatives of a body that, under the operation of the New Poor Law, had to complain that they were straitened in the honourable performance of their duty by the feeling that it was a tax upon their pockets which many of them were fearfully unable to sustain. Their case could not be brought out without being opposed to what were supposed to be the interests of a very large and influential body, who did not always exercise that humanity and discretion which they claimed from their medical officers—he referred to the ratepayers of England; but he hoped the case of the medical profession would now be put in so strong a

shape, that for very shame the parties concerned would be unable to resist it. He would only further suggest temperance in observation, and keeping as far as possible from anything that could create a single enemy to the cause in hand.

Mr. Healy, the secretary, then stated that meetings of medical practitioners had been held in the unions in the country, with a view to their sentiments being laid before this convention, together with a return of the state of the several districts with regard to medical relief. The resolutions agreed to at some of these meetings were read. At Walsall the resolutions recommended payment of medical officers by a salary, calculated from the registers of sickness and mortality in the several unions since 1837, and liable to be reviewed at stated periods; and that if it should be thought desirable to continue, as at present, a supplementary table of fees for cases requiring an unusual exercise of surgical skill and energy, or any unusually long or expensive attendance, those fees should be fixed by the councils of the College of Surgeons and Society of Apothecaries, or a committee formed of members of those bodies. It was found impossible to go through all these communications in public; it was stated that there was scarcely a union surgeon in the country who had not communicated with the gentlemen connected with this movement; and it was understood that the documents thus furnished would be carefully considered by a committee to be appointed.

The secretary also read letters of apology for absence, and expressing concurrence in the object of the convention, written by Dr. Heygate, Mr. Callaway, Dr. Watson. Dr. Todd Thomson, Mr. Guthrie, and Mr. W. W. Cooper.

Mr. Daniell, of Newport Pagnell, moved the first resolution:—

"That medical men charged with attendance on the poor are required to be thoroughly and practically acquainted with every branch of their profession; that they are liable to be called at the shortest notice, and without assistance, to treat the severest forms of disease, and the most formidable injuries which every species of accident may produce, as well as to attend the most difficult and appalling cases which obstetric practice can present. That in the discharge of these duties they have not only to contend with the anxieties inseparable from such weighty responsibility, but are brought into situations the most trying and repulsive, not only from the multiplied annoyances which attend them, but from concentrated contagion and other causes of disease, to which many of this valuable class of men have been victims; that the sacrifice of time, labour, and rest, which they are required to make is great and unlimited; and that the pecuniary expenses necessarily incurrred in visiting their patients and supplying the means of relief are unavoidably heavy. That, in addition to these trials, inherent to their office, there are others of a moral character very liable to be concomitant with them, and of a kind most painfully to affect minds of a highly honourable and sensitive class, to which it is sufficient merely to allude. That the mode in which these services are required to be performed, and the scanty remuneration awarded to the medical men engaged in them, constitute a grievance which cannot be too strongly stated, and for which redress should earnestly be sought. That in many instances the number of persons amongst whom the casualties of disease and accident may occur, and the area to be traversed in visiting the patients, are so great as to render early, constant, and satisfactory attendance physically impossible. That the pecuniary remuneration being granted on no fixed principle or scale varies greatly in different localities; but that in almost all it is so disproportionately small, and in very many of them falls so far short of the expense incurred, as to render a large portion of the medical relief bestowed on the sick poor a tax on individual members of the medical profession, instead of resting, like clothing, food, and other forms of relief, upon the ratepaying parishioners in general."

Mr. Daniell, after a few preliminary observations, remarked, that it was not in accordance with the duty which man owed to man that the services of medical men should be unrewarded, or paid for at a rate which put profit out of the question. There were in that profession, as in all, venal men—men who would contract for attendance on the poor with a mental reservation that they would not be losers; but who then were the victims? Why, the poor first, and, in a secondary sense, the guardians; for the protracted illness, or permanent infirmity, of the poor patient, swelled out the relieving-officer's accounts. In the majority of the unions of this kingdom the salaries of the medical officers would not pay for the value of the medicine administered if charged at the prices received by an ordinary druggist. Take the Newport Pagnell union; the parish of Astwood was three miles from the medical attendant, the population was 242, and the doctor received £2 a-year; Bradwell, population 374, salary £2. 10s.; Brayfield, population 83, salary 10s., and so on. From the parish books at the best time of the year, the payment appeared to be, on the whole, 2s. 6d. a-head for adult paupers, and 6d. for a child. In many instances the patients lived five or six miles from the medical officers; and there were many toll-gates. If it were asked why these duties had continued to be undertaken by medical men, the answer was that they had been from year to year expecting a change. In his (Mr. Daniell's) union, they went in a body to the board of guardians, and he proved that during the year he had dispensed medicine to the poor to such an extent, that charging for it as a druggist would, and allowing nothing for journeys or skill, he was absolutely £24 *minus*; the commissioner who was present overwhelmed the medical gentlemen with compliments for their gentlemanly behaviour and their temperate exposition of facts, and intimated that when he next came he should invite some of them to dinner, to talk the matter over; but, alas! the salmon had never leaped into the net, nor the mutton fattened in the pastures, which was to grace that festive board. The grievance complained of must be carried to the fountain head. The Government must be asked, as they had taken upon themselves half the expense, to see to the remuneration of the medical attendance upon the sick poor, and either to tax the parishioners according to the population, or to employ an actuary to form some correct scale of charges, with extra charges for mileage when a distance was travelled.

The labours of a clergyman were not superior, if equal, to those of a medical man; yet he observed recently an instance where the medical officer of a union had but £80 a-year, and the clergyman £200. In his (Mr. Daniell's) union the clergyman got £50 a-year. And here let one fact be mentioned without stating where it occurred:—A poor woman had typhus fever. The medical attendant considered that she was not in a condition to receive the clergyman's visit, and could not advise him to go. But she got better, and then she had a desire to see him. His answer was, "No, no; it is fever. I shall not go; I might take it home." No one present would grudge a clergyman his fair salary, but it ought to be remembered in comparing the two cases, that a medical man had not any such privilege as this.

Mr. Pearson, of Woolton, Lancashire, chairman of a meeting at Prescot, in seconding the motion, stated that he had to represent the case of a union which contained a population of 14,700, and the medical officer had £80 a-year. In St. Helen's the population was 25,000; salary £50; Rainford, 2,000; salary £10. In the district of Much Woolton, where he (Mr. Pearson) was the medical officer, the population was about 7,000; 1,600 of them lived three miles from his house, and 600 of them five miles; and he had the liberal sum of £10 a-year. Last year he caught the fever which so much prevailed about Liverpool, and was obliged to pay an assistant at the rate of £50 a-year for doing that for which his salary was £10 a-year. The guardians compelled him to do so; they would not allow him to throw up the office then. But when he applied a few weeks ago for an advance of salary, they said then, "No, you may give up your office."

The resolution was carried unanimously, as also were all the resolutions.

M. Tasker, of Melbourne, moved,—

"That the medical relief at present provided for the poor must be faulty and inadequate as respects both the patients and the public, is the necessary consequence of the errors which have been pointed out as inherent in the system itself. That though an immense amount of unrequited professional assistance is afforded, the limits of physical capability and pecuniary resources preclude medical officers from the possibility of giving prompt professional assistance in many instances. That it results from these defects in the system that patients who might by early and efficient treatment be quickly cured or relieved, and placed in a situation to support themselves and their families, may become a charge on their parishes for aggravated sickness and burial, or for protracted relief to themselves and their families. That the extra expense is not confined to that which might be made apparent from the parish books, but tends to swell the sums expended in hospitals, dispensaries, orphan asylums, and other institutions, besides an invaluable amount of individual charity."

The sick poor must suffer as long as the medical officer was underpaid; it was not in the nature of man to do work zealously and well, for which he was underpaid. The commissioners themselves knew it, and they ought to see that their instructions were carried out. In a minute of June, 1839, they stated that the fixed remuneration in rural districts for permanent paupers should be such as to afford the practitioner 6s., or 6s. 6d. per case, to be augmented if the extent of district demanded, and not to exceed 10s. But he (Mr. Tasker) was attending paupers at first at 1s. 3½d. per case. On remonstrating and producing that instructional letter, his salary was raised from £30 to £40, making about 2s. a case. The commissioners seemed willing to do what was right, but they dare not where the guardians could get medical men to take cases at 2s. 6d. Medical men entered the profession to live by it, as other men did; and any system of government that depended upon extraordinary and rare virtues in its officers, were sure to end ill; so the commissioners themselves told the Liverpool guardians. He had frequently seen cases, where, not exactly from neglect, but from the operation of the Poor Laws, the patient had been very much injured, and his health impaired, by not having proper attention and proper things to support him. He (Mr. Tasker) had himself reminded the guardians, "If I choose, I can withold medicines; I can protract fever several weeks, and by not securing the patient's early return to health, I may lay the ground for long-standing disease; you have no control over my judgment." All that was asked was, that they should act on principle, as they expected medical men to do. He (Mr. Tasker) had done his duty by the guardians; he challenged them to make a charge against him; and, therefore, he was fearless alike of them and the commissioners.

Mr. Cantrell, chairman of the meeting at Matlock, seconded the resolution. He had known a district let to a person living six miles from the principal market town, and ten miles from the extreme of the district; and in one sense it answered very well, for he lived so far off that they could not send for him much. That district was, very properly, divided now. The rates were certainly increased by an inefficient attendance on the poor; and nine-tenths of the medical officers were losing money by the poor, but were doing their duty by them. The system was bad; but in truth there hardly seemed any system, for in one union the payment per case varied from 1s. to 5s., and on the population it varied from £4 to £22 per 1000.

Mr. White, senior officer of the Holborn Union, believed that was the only union where the guardians would not pay the medical officers for midwifery cases. (No, no.) The commissioners found that those cases were not paid for, and they wrote to the board; they calculated that the midwifery would come to about £20 a-year, and they arranged to pay for midwifery cases, and deduct that amount from the previous salaries. No redress would ever be got from the boards of guardians. Owing to the awful increase of disease this year, he had already had to attend 2,027 cases, and his salary gave, as nearly as possible, 8¼d per case. Last year he found that it was not a halfpenny per case per day. The clergyman in that workhouse had £80 a-year; he attended twice on Sunday, and occasionally in the week; he was not overpaid. But, look at the clerks of the Boards of Guardians. In the Holborn Union, the clerk had something like £250 a-year, and could go out of town in the summer; the

clerks might not be overpaid, but they were getting more than double the medical officer's pay, for about a third of his work. It was said, "Oh, if you get to attend these unions the rich will employ you." No such thing; it was impossible. His (Mr. White's) income, as a private practitioner, had decreased £200 a-year since he had this appointment. Could he be restored to the practice he then held, he would throw this to the winds. Then it was said, "Oh, if you will not do the work, others will." That was not the answer of an honest man. But the force of public opinion was being brought to this subject. The press was stirring. The *Times* had acted nobly. It was not the wish of the public that a medical man should be worse paid than the veterinary surgeon who took charge of a gentleman's horse; and it was only necessary to open the eyes of the Government and of the commissioners, and they would do what was just.

Mr. Ebsworth, of Bulwell, deputed to attend by the officers of the Basford Union, could confirm the remark just made; he had a horse lamed the other day, and had had to pay 24s. for three weeks' attendance; whereas he and his medical brethren received from 1s. to 1s. 3d. per annum per case. The guardians stated that the extras made up for the salaries; but those extras were kept down, and much danger was caused to puerperal women because those orders were delayed by assistant overseers. In his union there was only one medical officer who had not to keep a horse for the service of the poor; and that could not be done under £25 or £30 a-year. The cost of drugs was reckoned at £5 for every 100. Here was one case: area 9,000 acres; population 4,429; patients in the year, 416; actual expenditure, £45; salary, £30. It was impossible that, at the low price fixed, the beautiful discovery of Jenner could be properly carried out. Amputation of a limb in the workhouse was not paid anything extra for.

Dr. Webster believed that about 6s. 6d. per case would be a just and fair remuneration; 2s. 6d. for medicines, 2s. 6d. for advice, and 1s. 6d. for mileage. but it was absolutely necesssary that medical men should get rid of boards of guardians; there ought to be a medical director or inspector, as in the case of the army and navy. If he have to inspect a certain number of unions he might be called in in difficult cases in consultation. The public press was on the side of the medical men. *The Times* had taken up their case, and there never was a question taken up by it when it was right, and it was generally right, if not always, but what that question was carried.

Mr. Liddle knew an instance in which a medical officer was not re-elected because he would not touch his hat to some of the guardians.

Mr. Lord, of Hampstead, moved—

"That this convention pledges itself to seek in the most persevering, but temperate manner, the redress of the grievances which have been set forth; that for this purpose a subscription be raised, and a standing committee be appointed to collect and digest information on the subject, to memorialize the Secretary of State for the Home Department and the Poor-Law Commissioners, and to communicate with the College of Physicians, the College of Surgeons, the Society of Apothecaries, the Provincial Medical and Surgical Association, and the National Institute of Medicine and Surgery in order to obtain the active co-operation of those bodies. That the committee be empowered to re-assemble the convention, and to take such other steps for the promotion of the object confided to it as it may deem expedient, and that it do consist of the following gentlemen, with power to add to their number:—

James Heygate, M.D., F.R.S., President of the Provincial Medical and Surgical Association; John Burton, M.D., Walsall; Thomas Hodgkin, M.D.; G. J. Guthrie, Esq; Nathaniel Clifton, Esq.; William Cantrell, Esq., Wirksworth; E. Daniell, Esq., Newport Pagnell; Alfred Ebsworth, Esq., Bulwell; H. W. Livett, Esq., Wells; J. A. Pearson, Esq., Woolton; R. T. Tasker, Esq., Melbourne; J. Hillwell, Esq., Uxbridge; H. Ancell, Esq.; W. J. Dale, Esq.; J. Liddle, Esq.; E. White, Esq.; C. F. Lord, Esq.; G. Ross, Esq."

Mr. Lord observed, that he had found guardians extremely unmanageable and most unreasonable. Some gentlemen present seemed to wish for payment by the case; but if the expense incurred by doling out separate orders for individual paupers was to be 6s. 6d. each, those orders would be withheld. A gentleman who received £30 from a union applied to be paid per case; it was agreed to; there was an unusual quantity of illness next year, but instead of £30 he only got £6 or £7. A heavy load lay at the door of the rate-payers, who elected guardians who did not discharge their duties. People asked, "Why have you continued this, then, so long?" Partly he (Mr. Lord) owned, that he might get his bread in the state to which it had pleased God to call him; and partly because he had felt determined to go on steadily, and work out better things. For he was told, "If you don't like it, give it up; we can ring the bell at St. Bartholomew's Hospital, and get plenty of men;" and there were medical men already in the vicinity, whose condition was considered better in the world than his (Mr. Lord's) who would be ready to take it if he gave it up.

Mr. Boulger, of Bletchley, in seconding the motion, said he undertook the charge of the poor in a union a few years ago, at £70 per annum, and found he had to expend £200 in the year; but he had the pleasure of receiving a vote of thanks from the guardians for losing £130 by them. In the medical order the commissioners directed certain extra fees for surgical operations and midwifery, over and above the salary, but in most of the unions a reduction of salary was thereupon carried, and acceded to by the commissioners. He (Mr. Boulger) was attending a district exceeding 15,000 acres, and including a workhouse, and he was expected to attend an institution containing 120 persons at a salary of £10 a-year; the two salaries ought to be kept distinct. There were no extra fees allowed for surgical cases in the workhouse; he was called near midnight to see a poor woman with strangulated hernia, within 100 yards of the workhouse, and had her moved there to try the warm bath and other remedies; an operation, however, had to be performed but he knew that by giving her that chance he lost his fee of £5., for that operation performed out of the workhouse.

Some conversation now arose with respect to the practice in particular unions. It was stated that at West Ham extra fees were allowed for operations, even in the workhouse; and that at Leeds and Birmingham the guardians had treated the medical officers very liberally. It was also insisted that the salaries did not rest wholly with the guardians, for that by the Poor-Law Amendment Act the commissioners were empowered to regulate the amount.

Mr. Livett, chairman of the Wells meeting, moved—"That the best thanks of this meeting be given to John Burton, M.D., for the important service which he has afforded to this convention in consenting to take the chair on the present occasion; to the Council of the National Institute of Medicine, Surgery, and Midwifery, for their kindness and co-operation, and more especially for lending the use of these rooms; and also to the editors of *The Times*, the *Medical Times*, the *Lancet*, and the *Provincial Medical and Surgical Journal*, and to other gentlemen connected with the public press, for their able exertions to obtain a reform of the present system."

Mr. Livett observed that he had been astonished at the inequality in the remuneration of medical officers. On collecting the accounts of fifteen unions in his neighbourhood, he found that the average payment per case varied from 5d. and a fraction (in Bath,) to 7s.

Mr. Martin, of Reigate, seconded the motion.

The vote was duly acknowledged by the chairman, and the meeting terminated at half-past six o'clock. It had continued full to the last.—(From *The Times* of Thursday, October 28th.)

General Retrospect.

PHYSIOLOGY.

HYBERNATION OF ANIMALS.

Dr. Barkow, of Bredau, has recently published a work on this subject, ("Der Winterschlaf nach seinen Erscheinungen, &c.,") a review of which in the *British and Foreign Review*, furnishes us with the following brief analysis:—

There is no instance of hybernation among birds, but in all other classes of the vertebrata, and among the invertebrata, there are examples.

During hybernation the animal temperature is little above that of the atmosphere; for temperature is in inverse ratio with the deepness of sleep.

When cold weather is protracted, the animals awake, and if the cold be not severe, remain so. If, however, the cold be severe, they become lethargic, and at last die.

In the hedgehog, coagulation of the blood and the separation of the serum and clot take place slowly; this is more marked in arterial than in venous blood, and in the blood of old than in that of young animals.

In animals killed during winter-sleep, the irritability of the muscles is retained longer than in the waking state. There appears to be no definite degree or form of development of the nervous or vascular system in hybernating animals, neither is there any peculiarity in the blood, which can be regarded as a cause of the phenomena. Barkow regards imperfect respiration as the immediate cause, but omits to state what is the cause of the imperfect respiration: thus begging the question.

Dr. Barkow found that in the hybernating state young toads and hedgehogs do not grow; the tame marmot when it wakes has forgotten its domestic habits, and is again the wild animal. [This is a curious fact if true.]

Winter-sleep is not of the nature of asphyxia; the animals may be as effectually drowned as during the waking state; before drowning, however, they awake imperfectly. So also an asphyxiated hybernating animal, if life be restored, passes into the waking state before it again subsides into winter-sleep.

PATHOLOGY.

PATHOLOGICAL ANATOMY OF THE INTESTINAL MUCOUS MEMBRANE IN INFANTS AT THE BREAST.

The following are the conclusions from an essay on this subject, by Friedleben and Flesch, of Frankfort:—

1. Morbid alterations in the intestinal mucous membrane are among the most frequent *post-mortem* appearances in the infant at the breast.

2. When chronic, these alterations lay the foundation of atrophy; when acute, they are evidenced by exhausting diarrhœa, which from the cerebral symptoms often attendant on it, is frequently mistaken for softening of the stomach.

3. Disease in the intestinal tube is more common than in the stomach.

4. The most frequent alteration is chronic inflammation of the glands of Peyer, and this is the most common anatomical cause of atrophy; next to this, red and white softening appear most frequently.

5. Red and white softening are but degrees of the same morbid process.

6. Acute inflammation of the Peyerian patches is one of the most fatal morbid alterations, and is a true inflammation, as is attested by the attendant affections.

7. The disease is often mistaken for dothinenterite, which latter never occurs in infants at the breast.

8. Secondary acute inflammation of Peyer's glands, as well as of the solitary glands, is a part of the process of tuberculization; in all such cases tubercles of the spleen are also met with.—*Zeitschrift für Rationel Medicin.* Bd. v., H. 3.

NATURE OF THE FLUID SECRETED BY THE INTESTINAL MUCOUS MEMBRANE IN CHOLERA.

Andral has examined the rice-water evacuations of cholera, and determines respecting their nature as follows:—

1. The white matter which is formed in the intestines of cholera patients is not a part of the blood itself, as it contains neither albumen nor fibrin.

2. The fluid is nothing more than modified mucus.

3. Its essential microscopic character consists in the presence of a number of cells with nuclei resembling those of the pus-globule.

4. The examination of the blood of cholera patients shews that the albumen exists in normal proportions.

5. The explanation of the blue stage by the change

induced by the drawing off of the serum cannot be admitted.—*Gazette Médicale*, No. 33.

SURGERY.

STRAW SPLINTS FOR FRACTURES.

At a recent meeting of the Surgical Society of Ireland, Mr. Tuffnell exhibited a form of splint which he had been in the habit of using for some years, and which he believed had first been invented by Baron Larrey. It is made by filling a linen bag, of the size of the splint required, with unbroken wheat straw, that used in the country for thatching being the best. The straw must be cut off at the length to fit the limb, and the open end of the bag sewn up. The splint thus made combines the double advantage, of being both splint and pad in one, and possesses the following advantages over the wooden or whalebone splints commonly in use. When lotions are used to subdue the inflammation in a recent fracture, the apparatus need not be removed from the limb, as evaporation takes place as rapidly through the straw as if the limb was laying unconfined. No padding being used, the hard lumps formed by tow or wool that has been wetted and allowed to dry, and which cause such pain and inconvenience to the patient, are avoided; and if undue pressure is sustained by any projecting process of bone, by inserting the point of the finger, and rolling the straws one upon the other, a hollow is at once formed for the part. In fractures of the upper arm, Mr. Tuffnell said he had, in using the wooden splints and pads, found great inconvenience from the difficulty of keeping the four angles in contact, especially at night and in muscular arms, the edge of one splint rolling over the other, and at once displacing the whole apparatus; whilst the straw splints, when bound on the limb, so embraced it as to keep up one uniform pressure on all sides, and in fractures of the forearm acted most beneficially by pressing the muscles into the interosseous space more and more as the fillets or bandages were tightened. These, he said, were advantages he had found to result from the common use of the splints; but what he had to adduce most in their favour was the power they gave to the military surgeon and country practitioner of forming at once, in almost every situation in which he could be placed, an efficient contrivance for the treatment of all ordinary fractures; whilst for hospital practice their cheapness was of no inconsiderable advantage. In compound fractures, by directing the nurse to take out the soiled straw, wash, and re-fit the case with fresh, at each dressing the surgeon is enabled, at the very least expense, to have a clean apparatus, and thus avoid the necessity of keeping a source of effluvia near the patient, at a period when his recovery and well-being so mainly depend upon pure ventilation and fresh air. In fractures of the forearm, by substituting a fillet and buckle for the ordinary tape or bandage, the patient is enabled to tighten or relax the pressure of the splints according to his own sensations of uneasiness or comfort, and the lightness and regulated pressure make them much less irksome than the old-fashioned wooden splint.

Mr. M'Coy approved very highly of the apparatus; and Dr. Jacob said it appeared to him to be a most admirable contrivance. At the first glance, one might be inclined to think it not sufficiently strong; but, on testing the apparatus, it was found a most powerful one; and, as Mr. Tuffnell had remarked, the facility of moving the straw, so as to accommodate the splint to the inequalities of the limb, was a very marked advantage. He looked on Mr. Tuffnell's suggestions as most valuable for securing an extemporaneous mode of coaptation, more particularly to gentlemen who are to practise in the country, where there is generally so much difficulty in persons accommodating themselves in urgent cases, sudden as fractures usually are. He had seen an old hat furnish a very efficient splint in the small fractures of children. Then there was the cover of an old book; but even in obtaining this there is often a good deal of difficulty when the inmates of the house a man is called to are not of literary habits. A capital extemporaneous splint, which Dr. Jacob had seen used in the fractures of children, was the fresh bark of a tree taken off while the sap is rising; it fits admirably, just like a paste-board soaked in water. He had seen a case managed in this way by a common bone-setter, and the whole thing turned out in a way that would do credit to any of our metropolitan surgeons.—*Dublin Medical Press.*

DISLOCATION OF THE FOREARM FORWARDS WITHOUT FRACTURE OF THE OLECRANON.

This kind of dislocation was a few years since considered impossible, and it was considered indispensable to the displacement that there should also be fracture of the olecranon. It is, however, now established that dislocation without fracture of that process may take place, and two or three instances have been placed on record. A fourth example has recently been met with by M. Guyot, of which we here give an account. A young man, aged 14, was thrown from a carriage, after which he found it impossible to move the elbow joint. He was examined three hours after the accident, but could give no account of the manner in which he felt. The forearm was extraordinarily moveable in every direction, the elbow joint was tumid and extremely painful. On the posterior aspect of the joint, a hollow was found in the natural situation of the olecranon; in front two projections in some manner represented the elbow in an inverted position. The forearm was elongated and in a right line with the humerus.

M. Guyot at first considered it to be a case of anterior dislocation of the forearm with fracture of the olecranon, but was surprised at not finding the fragment of the olecranon drawn up by the action of the triceps. He further observed that the forearm might be moved in every direction with the greatest freedom. Under the uncertainty what was the exact pathological condition of the joint, M. Guyot determined on treating it as dislocation forwards with fracture. He therefore made extension, at the same time carrying the forearm backwards, and flexing it on the arm, when the replacement was immediately effected, and the re-appearance of the olecranon at once explained what had been the nature of the accident.—*Revue Medico-Chirurgicale*, Aout, 1847.

MIDWIFERY.

A CHILD BORN AT THE NINTH MONTH OF UTERO GESTATION, PASSING THROUGH AN OBLONG APERTURE UNDER ONE INCH IN ITS NARROW, AND TWO INCHES AND A HALF IN ITS LONG, DIAMETER.

The case is related by Dr. Simpson, of Edinburgh. The patient was a woman, 34 years of age, originally well formed, but from the effects of malacosteon, the bones of the trunk and extremities became shortened and deformed; and, from being a somewhat tall woman, sunk down in the course of seven or eight years into a deformed dwarf-like figure, measuring about four feet in height. When first seen after her pregnancy, it was so far advanced as to preclude the idea of delivery by the induction of abortion or premature labour, and all attempts to touch the os uteri, on account of the deformity, were ineffectual. After the labour commenced, when the medical attendant, Mr. Wiseman, arrived, he found the soft scalp of the child already bulging through the external parts. Some detached bones, included in the portion of scalp that had passed, allowed him to obtain a firm hold of the protruded portion of the head, and thus enabled him to use some extractive force. In half an hour, by this assistance, the child was entirely born. The time at which the child died cannot be accurately determined, as the mother imagined she felt it living and moving up to the time of her delivery. She has made a good recovery. The infant measured 18½ inches from the crown of the head to the heels; but its limbs and body were thin, lank, and atrophied; and its weight was only three pounds two ounces. The placenta was small and atrophic, and contained, scattered throughout it, a number of those white tubercles which we so often see connected with and causing marasmus and death of the fœtus *in utero*. Some of these tubercles were of the size of hazel nuts. The pelvis of the mother was excessively deformed and contracted. In front, the walls felt on examination, doubled or collapsed together; and the outlet, which was the only part which could be accurately examined, was exceedingly deformed and diminished in size. It was impossible to introduce two fingers between the tuberosities of the ischia; hence this diameter of the outlet was evidently under an inch. Posteriorly, or opposite the sacro-sciatic ligaments, there was transversely more space; but the strong anterior curvature of the coccyx and lower-end of the sacrum seemed to curtail the conjugate diameter of the opening, and to prevent the possibility of admitting, when fully dilated, more than three, or at most, four fingers, even in this direction.—*Monthly Journal*, July, 1847.

TOXICOLOGY.

GALVANISM IN NARCOTIC POISONING.

[The following case in which galvanism was employed at the Middlesex Hospital, exhibits in a striking manner the beneficial effects of that agent in poisoning by opium.]

A female was brought into the hospital in a state of deep narcotism. In the first instance the stomach-pump was used, and several pints of water were thrown into the stomach; but during the operation, as is sometimes the case, the large quantity of tough ropy mucus which collected around the pharynx and glottis, rendered it doubtful whether she would not die of asphyxia before we had emptied the stomach, and the tube was of necessity withdrawn before the whole of the contents were removed. The ejected fluid was only slightly discoloured, and tainted with scarcely any perceptible smell of the poison. During and after this operation, pinching, slapping the face and chest sharply with the corner of a damp towel, &c., produced but momentary and imperfect consciousness; indeed, so transient, as scarcely to draw forth the monosyllable "don't." She was now put on her legs, but fell down like a lifeless carcass. The galvanic battery was then got in order, and whilst the wires were being adapted, she fell off into a still deeper state of unconsciousness than she was previously in. When the sponge-directors were applied, for a few minutes no sensible effect was produced, but soon afterwards the muscles of the neck began to quiver, when sensibility appeared gradually to return, and after twenty or thirty minutes the stimulus produced undoubted discomfort, evidenced by shrugging of the shoulders, and attempts to avoid contact with the sponges; but the first marked influence of its effect was the ejection of a large quantity of fluid from the stomach. In another hour she appeared quite lively, answered questions distinctly, and in a moderately loud tone, though in a somewhat peevish manner. The galvanism was occasionally intermitted for a few moments, when she relapsed almost instantaneously, and "dropped off" in the midst of a sentence which she had commenced during the application of the stimulus. The pupils remained unaffected till about two hours had elapsed, when they became somewhat more dilated, and sensible to a strong light. All the symptoms gradually diminished, but it was absolutely necessary to re-apply the galvanism at longer intervals until half-past five p.m., when she seemed so far recovered as to allow of her removal to the ward.

From the easy diffusibility and quick propagation of the galvanic fluid over the whole system, irritation, capable of exciting action almost *ad libitum*, can be applied to any or even the whole part of the body at one time, and that of a nature void of all the unpleasant results which necessarily follow bastinadoing, cold affusion, searing, dolichos pruriens, and a whole catalogue of equally brutal resources, which, for the safety of the patient, have necessarily been had recourse to before galvanism was adopted. Dipping the sponges of the directors, on this occasion, in moistened salt, assisted the passage of the current, and increased the conducting power to a striking degree. In ordinary cases where galvanism is used, the application, if strong, reddens the skin, and even produces some tumefaction which remains often for hours; but in this instance, although the power was probably three or four times as strong as is generally used, not the slightest discolouration was observable. It should be noticed, that as soon as she was allowed to fall off into a deep sleep, which she was occasionally permitted to do, after the extraordinary influence of the battery was fully proved, in rousing her instantly from the deepest narcotism to a fretful impatience, the pulse gradually

lowered in its power, became slower in its action, and irregular in its movements; but no sooner was this remarkable stimulus laid on again, than the pulse rallied, was regular, fuller, and quicker, and the respirations, previously laboured, slow, and unequal, became more frequent and deeper. The countenance also evinced, in a striking manner, the singular influence of this agent. When she was admitted the cheeks were of a leaden hue, and the lips of a tawny colour; but after the expiration of one hour, with the use of the battery, it resumed a somewhat natural tint.—*Lancet*, June 19th.

BUCHU IN ANASARCA.

While from day to day new remedies are proposed, and are highly extolled for their virtues, at the same time many valuable ones formerly in use, and of equal, if not superior, efficacy are altogether laid aside and forgotten.

In cases of general anasarca, consequent upon inflammatory affections, as well as those dependent upon organic disease, I have of late years found more unequivocal benefit to be derived from the use of the "Diosma crenata," than from any other single article of the Materia Medica. I have generally combined the fixed alkalies with it, and the form I most prefer is—

R. Infus. Diosmæ, oz. vij.; Sodæ Bicarb., Potassæ Bicarb., Potassæ Nitratis, sing, scr. ij.; Syr. Aurant., dr. vj.; Tinct. Scillæ, dr. ij. M.

That kind, the leaves of which are long and linear, is, I think, to be preferred to the other, the leaves of which are lanceolate, although both possess diuretic properties to a marked extent.

A MEMBER.

Medical Intelligence.

PROGRESS OF THE CHOLERA.

It is announced in the *Union Médicale* that a case of cholera has been observed in the Commune de Marly, Valenciennes, by a physician of that town. We are not disposed to attach much importance either to this case or to that which was reported to have occurred some days ago in Vienna.

MEDICAL TESTIMONIAL.

A handsome salver has lately been presented to T. T. Smart, Esq., surgeon, Bedminster, by a numerous body of his medical friends, containing the following inscription:—"Presented to Thomas T. Smart, Esq., surgeon, by his medical brethren, as a token of the high esteem in which he is held by them, for his spirited and praiseworthy endeavours to support the dignity of that profession of which he is so distinguished an ornament."

MANCHESTER MEDICAL SOCIETY.

At the annual meeting of the Society, held in the Society's rooms, Royal Institution, on the 6th instant, the following gentlemen were elected officers for the ensuing year:—*President:* Dr. James L. Bardsley.—*Vice-presidents:* Mr. Hunt, Mr. Noble, Dr. Howard, Mr. Windsor.—*Council:* Messrs. Crompton, Brownbill, Ker, Dorrington, Harrison, Middleton, Allen, Catlow; Drs. Wilkinson, Bell, Browne, Watts.—*Treasurer:* Dr. Ashton.—*Hon. Secretaries:* Drs. Renaud and Reid.—*Hon. Librarian:* Mr. Stone.

APPOINTMENT.

Dr. Macdonnell has been elected Professor of Practical and Descriptive Anatomy to the Royal College of Surgeons of Ireland.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members on Thursday, Oct. 14, 1847:—Theodore Romney Willan, Corby, Lincolnshire; Humphrey Sandwith, Hull; Henry William Hayward Richardson, Chilmark; William Beedzler Deacon, Market Depping; William Parker Shipton, Ashbourne.

Thursday, October 21st:—Frederick Farr, Dunstable; Charles Gage Brown, Portsmouth; Joseph Holmes Buxton, Bishop Auckland; John Fisher, Warminster; Henry Harris Muggeridge, Uxbridge; John Newton, Nottingham; William Bannister, Havant, Hants.

OBITUARY.

Died, October 7th, at Cashel, aged 36, of fever, Dr. C. Minchin.

October 9th, at Nice, after a long and painful illness, Dr. Miquel, Principal Editor of the Bulletin de Thérapeutique.

October 26th, suddenly, at Ledbury, Charles Cooke, Esq., surgeon.

Lately, aged 72, Dr. Burdach, Professor in the University of Königsberg.

BOOKS RECEIVED.

Practical Observations on Certain Diseases of the Chest, and on the Principles of Auscultation. By Peyton Blakiston, M.D., F.R.S.; Fellow of the Royal College of Physicians; Physician to the Birmingham General Hospital; &c. London: Churchill. 1848. 8vo. pp. 368.

On Ringworm: its Causes, Pathology, and Treatment. By Erasmus Wilson, F.R.S., Consulting Surgeon to the St. Pancras Infirmary. London: Churchill. 1847. pp. 102.

A Practical Treatise on the Causes, Symptoms, and Treatment, of Spermatorrhœa: by M. Lallemand. Translated and Edited by Henry J. McDougall, M.R.C.S., &c., &c. London: Churchill. 1847. 8vo. pp. 333.

A System of Practical Surgery, &c. Second Edition. By John Lizars, late Professor of Surgery to the Royal College of Surgeons, and Senior Operating Surgeon to the Royal Infirmary of Edinburgh. Edinburgh: Lizars; London: Highley. 1847. 8vo. pp. 503. Numerous Plates.

On the Inhalation of the Vapour of Ether in Surgical Operations; &c. By John Snow, M.D., Lond.; &c., &c. London: Churchill. 1847. 8vo. pp. 88.

Deafness practically illustrated; &c. By James Yearsley, M.R.C.S., Surgeon to the Metropolitan Institution for Diseases of the Ear. London: Churchill; and Highley. 1847. pp. 181.

An Introductory Lecture, read to the Medical Classes, in King's College, London, October 1st, 1847. By George Budd, M.D., F.R.S., Professor of Medicine in King's College, London; &c. London: Churchill. 1847. 8vo. pp. 24.

Tables for Students. By William E. C. Nourse, M.R.C.S. London: Churchill.

Reminiscences of a late Physician. London: pp. 8.

Medical Discussion on Teetotalism, between R. B. Grindrod, L.L.D, &c., and William Cock, Esq., M.R.C.S., and John Coventry, Esq., M.R.C.S. London: Hall and Co. 1847. pp. 71.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

Gentlemen who have not paid their subscriptions for the current year, or who are in arrears, are requested to send the amount due to the Treasurer or the Secretary of the Association.

ROBERT J. N. STREETEN, Secretary.

ERRATA.

In Dr. Ogier Ward's paper on the Pathology of Hooping Cough, p. 565, col. 1, line 7 from the bottom, for "safe guard" read "*safe guide.*"

Page 568, col. 1, line 32, for "bronchi, by the mucus being" &c., read "bronchi by the mucus, being" &c.

METEOROLOGICAL JOURNALS FOR JULY, 1847.

Kept at Sidmouth, by W. H. Cullen, M.D.; at Honiton, by Mr. Rogers; at Romsey, Hants, by F. Buckell, Esq.; at Uckfield Sussex, by C. L. Prince, Esq.; and at Harrogate, by G. Kennion, M.D.

		Sidmouth.	Honiton.	Romsey.	Uckfield.	Harrogate.
External Thermometer.	Mean at 9 a.m.	64.55	63.77	62.03	.	67.193
	„ at 9 p.m.	62.04	8p.m. 63.00	61.05	.	59.00
	„ of the Maxima	71.40	72.38	74.54	80.65	.
	„ of the Minima	55.91	53.87	54.27	53.09	.
	Absolute Mean	63.37	63.12	64.40	66.87	63.965
	Mean of 10 preceding years	59.59	.	.	.	.
	Extreme highest	15th 79.00	15th 83.00	14th 86.00	14th 98.00	15th 76.00
	„ lowest	4th 47.75	4th 46.00	23rd 47.00	24th 43.00	16th 54.00
	„ range	31.25	37.00	39.00	55.00	22.00
	Mean daily range	17.00	19.12	25.59	27.54	.
	Greatest ditto	25.00	.	5th 34.00	.	.
	Least ditto	8.00	.	7th 7.50	.	.
	Maximum in the Sun	.	:	.	14th 113.00	.
	Minimum on the Grass	.	.	.	24th 38.00	.
Barometer.	Mean at 9 a.m.	30.285	29.63	29.366	30.00	29.903
	„ 9 p.m.	30.530	8p.m. 29.61	29.313	.	29.884
	Extreme highest	1st 30.530	1st 29.89	2nd 29.610	1st 30.29	1st 30.25
	„ lowest	7th 30.000	7th 29.34	7th 29.070	7th 29.85	7th 29.60
	„ range	.530	.55	.540	.40	.65
Dew Point.	Mean at 9 a.m.	58.20	.	60.00	59.58	.
	„ 9 p.m.	57.10	.	58.44	.	.
	Days fine	21	26	22	.	22
	„ dull and variable	3	.	.	.	.
	„ on which any rain fell	7	5	9	.	9
	Quantity of rain in inches	2.294	.	3.525	0.22	:
	Evaporation	.	.	2.693	4.55	.
	Thunder and lightning	6th & 25th	.	17th & 20th	.	.
	Prevailing Winds	N.W.	SW. NE.	NE. SW.	W.	SW. NE.

TO CORRESPONDENTS.

Communications have been received from Mr. W. Rogers; The Sheffield Medical Society; A Member; Mr. P. H. Bird; C. A.; Mr. C. L. Prince; Dr. J. Barclay; W. R. Alford; Mr. W. J. Gorringe.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

ON THE PHOSPHATE OF AMMONIA, AND ITS VALUE IN THE TREATMENT OF GOUT AND RHEUMATISM.

By SAMUEL EDWARDS, M.D., Physician to the Eastern Dispensary of Bath, and to the Bath Ear and Eye Infirmary.

(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, held at Bath, September 30, 1847.)

The obstinate and sometimes intractable nature of gout and rheumatism, and the fact of the almost innumerable remedies that have been from time to time introduced to notice, and subsequently found incapable of producing any decided or uniform mitigation of their symptoms, will be sufficient to justify me in making a few remarks upon the very beneficial effects of a salt, which, as far as I know, has been little or never in this country applied to the relief of gout and rheumatism, or in fact, generally employed as a therapeutic agent. Some years since, I was informed by an American friend, that he had seen the phosphate of ammonia prescribed occasionally in those diseases, and with unquestionably good results; I therefore determined, when opportunity presented, to put this medicine to the test of experience, which I have now done to a considerable extent, and with a degree of success (especially in those cases afterwards to be pointed out,) which I did not in the least anticipate, and which induces me to lay the following remarks before you, and I take this opportunity of expressing a hope, that should any be influenced to make a trial of the remedy, they will communicate the results of their experience.

The phosphate of ammonia, as I said before, has never, in this country, been applied generally to therapeutic purposes. In the standard works on Materia Medica, no mention is made of it at all. Dr. A. T. Thomson states that the only medicinal substances which contain phosphorus, are the quaternary compounds, phosphate of soda, and phosphate of lime.* Pereira and other authorities to whom I have referred, being equally silent upon this salt, I subjoin a description of it as occurs in Brande's "Manual of Chemistry," being an epitome of the researches of Mitscherlich upon it. "Phosphate of ammonia (p'+a)—The mutual action of anhydrous phosphoric acid and ammonia has not been studied: they probably give rise to *amide*. The neutral phosphate of ammonia may be obtained pure by saturating phosphoric acid with ammonia or carbonate of ammonia, and carefully evaporating, so as to avoid the production of an acid salt. It may also be formed by adding carbonate of ammonia to the acid phosphate of lime, obtained from bone earth, till no further effervescence or precipitate of phosphate of lime follows, filtering and evaporating, taking care, however, to leave slight excess of ammonia: the solution left to itself deposits the salt. Its primary form is an oblique rhombic prism, the smaller angle of which is 84° 30′. Its prisms are often terminated by diedral summits." (Mitscherlich, Ann. de Chim. et Phys., xix. 382.) The salt is soluble in four parts of cold water; when heated it melts, and losing ammonia, leaves hydrated phosphoric acid. It exists in the urine of carnivorous animals. This salt has not been accurately analysed, but it probably consists of—

Ammonia - . -	1	17.	25.57	
Phosphoric Acid -	1	36.	54.13	54.426 Mitscherlich
Water - ` - -	1½	13.5	20.30	
Phosphate of Ammonia	1	65.5	100.00	

There is also a biphosphate which I have, however, not used: its crystals are not so soluble as the above, not acted upon by the air, and consist of one equivolent of ammonia, two of acid, and three of water. The primary form of this crystal "is an octohedron, with a square base; but the right square prism terminated by the faces of the primary form is the most frequent."*

The taste of the phosphate of ammonia is cool, saline, and somewhat urinous: hot water dissolves scarcely more than cold. It is deliquescent. According to Berzelius it exists in healthy human urine in the proportion of 1.65 in every 1000 parts. I have, however, found it far more abundant than this after urine becomes putrid. This salt has long been used in the arts as a good flux for assays and the blowpipe; it is used also in the manufacture of artificial gems, and of stained glass. Some years ago Gay Lussac recommended muslins and articles of that kind to be immersed in a solution of equal parts of this salt and of hydrochlorate of ammonia, as it was found to a

* Dr. A. T. Thomson's "Materia Medica and Therapeutics," p. 101.

* "Turner's Chemistry," p. 676.

considerable extent to render them incombustible. Muslins thus treated, after being dried, were burned with difficulty, and could not be consumed with flame, in consequence as he supposed of the prevention of the access of oxygen by the glazing which the salts form at high temperatures.

When taken internally, in the dose of ten to fifteen grains, (that which I have ordinarily given,) it produces no great sensible physiological effects; from fifteen to twenty minutes after, it occasions a slight feeling of nausea, accompaned with heat at the epigastrium, immediately after which, if the surface be kept warm, either by additional clothing or exercise, it acts as a somewhat powerful stimulating diaphoretic. I have also several times seen it act as a diuretic; and in two cases in the dose of ten grains, it has had an aperient action; but both these being females with highly irritable mucous membranes, the latter must not be considered, I conceive, as any ordinary physiological effect. When administered in cases where uric acid exists in increased quantity in the system, and is deposited in the urine, either pure or combined, such as peculiarly exists in gout and rheumatism, it speedily reduces the amount. This fact I have repeatedly ascertained, both chemically and microscopically, and in many cases it has received the confirmation of my friend Mr. Bartrum, who was wholly at first unaware of my motive in begging his examination of the specimens.

Since employing this remedy, I find that Dr. Buckler, of Baltimore, (U.S.,) has also employed this salt in these diseases, and with great success. He asserts he was led to believe that these diseases were produced by lithic acid, existing as an insoluble compound with lime or soda, thereby preventing elimination of it by the skin or kidneys. The phosphate of ammonia, by decomposing those lithates, and forming soluble salts, would thus tend to the subsidence of the affections in question. Two other American physicians have written upon it, in whose practice it was attended with no good results,—the one, Dr. Reuchtenbacher, who disbelieves in its efficacy; the other, Dr. Voight, who goes so far as to say that it is a hazardous medicine, and that he has seen three grains produce dangerous symptoms.* It is, however, extremely doubtful in my mind if these dangerous symptoms had anything to do with the salt at all, as Dr. Buckler, it appears, mentions nothing of the kind; and now, after having employed it for a twelvemonth at the Eastern Dispensary of this city, in a large number of cases of various kinds, and other friends at my suggestion having employed it too, I feel myself correct in asserting that it has never given rise to any disagreeable symptom, but on the contrary, with some two or three exceptions, has acted always with remedial effect.

* *Vide* Ranking's "Abstract," vol. iv., July to December, 1846.

It is not my intention, nor would it be altogether becoming in me, before you, to enter into very minute particulars relative to the opinions of various individuals, as to the proximate cause of gout and rheumatism, but I feel it necessary to make a few remarks upon this subject, so as clearly to understand how the remedy under consideration, as I conceive, acts upon the system at large. I have for three or four years had these diseases associated in my mind with such a disordered assimilation, primary and secondary, as would lead to the production of a large and undue deposition of lithic acid, or its compounds, in the system, occasioning such on extent of acrimony in the fluids of the body, as to irritate and excite to a morbid action, the lymphatics and minute terminations of the arteries, in the several parts of the body, and not improbably of the lining membrane of the larger arteries, becoming in fact a source of irritation wherever deposited, more especially in parts, such as the joints and sheaths of the ligaments and tendons, which, being inextensible, would sooner probably become affected by such distempered excitability. If such a view were correct, we shall see that many writers on this subject have been correct, but only partially so; thus, Jeans and Sutton believed that the alimentary function was deranged; Wallis, the nervous system; Latham, that the lymphatics were obstructed; and Kinglake, that the ligaments were inflamed. Long ago Parkinson considered the blood to be at fault, and that the disease depended upon a peculiar saline acrimony existing in it. With regard to gout, at the latter end of the last century, Mr. Murray Forbes declared his conviction of the lithic acid being the cause of the disease. Sir Charles Scudamore, in his work on gout, does not point out what he considers the exact proximate cause, but comes to this conclusion, that "gout is a disease depending upon a redundancy of blood, with relation to the powers of the circulation, particularly affecting the system of the vena portarum, and the consequent functions of the liver, together with the production of a morbid change in the secreted products of the alimentary canal in general, and of the kidneys in particular."

I can conceive the question occurring to your minds, how is it that gout and rheumatism should not exist in all those acute inflammatory diseases, especially affecting those organs that influence the circulation, where we know that uric acid is found in abundance in the system? In reply to this I can only answer, that the same peculiar disposition existing in the body will account for it as, we must suppose, accounts for the facts, that the gout affects the hand in females more frequently than in males; that the children of gouty parents may suffer, one from scrofula, another from asthma, and a third from gout, of which I know an instance; or, that "in the same family, the males are known usually to present the well-marked symptoms

of external gout; while in the females, various symptoms of disorder of the brain, the heart, or the kidneys, usually appear;"* or lastly, that the same medicine introduced into the system should act in a different way upon different individuals, for instance, mercury, ipecacuanha, &c.

From much observation of gout and rheumatism, so many points do I see of analogy between these diseases, that I am inclined to view them with Barthez, Chomel, and others, as only varieties of the same disease. I believe with them, it is almost futile to attempt a diagnosis beyond marking the parts affected in each; and even this is anything but diagnostic, for most practical men will agree with the observation of Dr. Todd, who says, "Gout shews, at first, a decided predilection for the small joints—those of the hand and foot, but in time all the articulations are obnoxious to it; and not only they, but also tendons, ligaments, bursæ, and synovial sheaths."† Most will allow that the one often passes into the other, and that such an extreme resemblance occasionally exists between them, that the term rheumatic gout is not unaptly given, especially if we accept the views of Prout relative to these diseases, who says, "When the lithic and lactic acids are developed together, as they may be and often are, the phenomenon may be supposed to show that the mal-assimilation involves both the gelatinous and albuminous textures; and that the accompanying disease partakes of a mixed character, or in fact constitutes what is not improperly termed *rheumatic gout*."‡ Professor Liebig, however, has called in question the existence of lactic acid at all, and from his enquiries it would appear, that Berzelius mistook it for that singular substance discovered lately by Pettenkofer, which abounds in azote, and is stated to be in the proportion of five grains in every 1000 grains of urine. Dr. Bird remarks, "Its formula differs only in the proportions of the elements of water from that of uramil, a product of the decomposition of uric acid, and which may be regarded as uric acid in which the elements of urea are replaced by those of ammonia and water. Is it possible that this new body, is a transition formation between uric acid and urea?"§

Dr. Prout seems to have arrived at the conclusion that these diseases are so associated with the existence of these acids, that "they may be regarded as *somewhat* in the light of *materies morborum*; or, strictly speaking, the undue presence of these acids in the urine or elsewhere, under certain circumstances, may be viewed as indices of the existence of certain diseased actions going on in the primary tissues of the body; and which are known by the names of gout and rheumatism." From my enquiries and observations, however, I am, with deference, inclined to view both diseases as caused by this superabundance of uric acid, either pure or combined, in the system, occasioned chiefly by disordered action in the assimilating processes, for I believe "the elements of the acid and its combinations are in these diseases supplied both by the nitrogenized elements of the food, as well as by the changing tissues of the body,"* thereby occasioning the morbid actions above alluded to. Contingent circumstances of age, hereditary disposition and the like, decide whether the symptoms will be those which are most frequently referred to gout or to rheumatism; at the same time my observations lead me to consider that the latter is more frequently associated with uric acid in the system pure, the former combined with soda or lime. This is strengthened by the fact that in gout the liver is greatly more deficient in its action, by which means probably a deficient elimination of soda from the blood occurs, which, uniting with the lithic acid in the system, produced in the secondary assimilating process, accounts for the characteristic gouty concretions. I may remark, in confirmation of that which has been advanced relative to disordered primary assimilation, that all authors and observers agree in stating that the functions of digestion and the hepatic and urinary secretions, are deranged prior to the appearance of both diseases, more especially of gout and the sub-acute form of rheumatism.

It is well known and not doubted by most physicians, that by proper dietetic measures, the gouty disposition may be prevented from being engendered. The hereditary disposition or transmission, if it really exists, according to Sir Charles Scudamore, and Dr. Mackintosh, does not in the majority of instances, as some suppose, go to prove the existence of a "peculiar matter," but only, as I conceive, of a certain diathesis or conformation in the system. With regard to hereditary rheumatic diathesis, proofs are wanting that it really exists. Chomel, however, states that out of seventy-two cases, thirty-six were born of rheumatic parents. It is well known that neither diet nor exercise is beneficial or curative in gout or chromic rheumatism, without the alimentary canal, and the cutaneous, and urinary secretions are in a state of health; but as they (diet and exercise,) tend to the improvement of these secretions, they become indirectly curative. Sir George Baker records a case in point, of the late Mr. Wood, in the "Transactions of the Royal College of Physicians," perhaps remembered by most, who, after living freely on fat meats, butter, cheese, ale, &c., became exceedingly corpulent, began then to suffer heartburn, sickness, constant thirst, pains in the bowels, headache, giddiness, and other symptoms of disordered digestion; then came on violent rheumatism and afterwards frequent attacks of gout. Under medical care and rigid abstinence, the dyspeptic symptoms forsook him, and finally, the gout and rheumatism. Dr. Mackintosh states, in

* Craigie's "Practice of Physic."
† Todd "On Gout and Rheumatism."
‡ Prout "On Urinary Diseases."
§ Bird "On Urinary Deposits."

* Idem.

speaking of acute rheumatism, "It is of the utmost consequence to regulate the diet, as relapses may frequently be traced to indigestible articles of food."* Dr. Todd also remarks, "the slightest irregularity of diet is speedily felt, and quickly aggravates the symptoms." An acid condition of the stomach, of the blood, and of the secretions, is generally found in gout and rheumatism. Berthollet has shown that the skin in gouty inflammation secretes a fluid which extensively reddens litmus paper, and the acid sweat of rheumatism is familiar to all.

That these diseases are connected with morbific matter circulating in the blood, has been ably advocated by Dr. Todd, and this peculiar matter, whatever may be its nature, he believes is formed in the primary and secondary assimilating processes, thereby occasioning a disturbance of longer or shorter duration, of greater or lesser intensity, in the nutrition of parts to which it is attracted. His arguments on these points are valuable, and will well repay careful perusal. I regret time will not allow me to enter upon them here, but he considers it "impossible to explain the phenomena of gout upon any other hypothesis than that which supposes the existence of a peculiar matter in the blood;" and in reference to rheumatism he remarks, "in this disease, general nutrition is disturbed, not by mere local disease, nor by any impression on the nervous system, but by the development of a morbid matter in the blood, which visits every part to which that fluid is distributed, but which is attracted by some textures much more than by others."

With respect to the similarity of the two diseases, Heberden (whose description of the diagnosis between them is unquestionably the best,) states, (and all I think, will allow it,) "that young children may suffer from violent rheumatism, especially those who, from an inherited diathesis, will suffer from gout when they arrive at manhood;" and Dr. Todd remarks, that "the children of gouty parents are more liable to this disease, (rheumatism,) than those who have sprung from an untainted source." He goes so far as to say, that the remarkable resemblance, however, between the same diseases, may justify our concluding, that a certain similarity of composition may exist between the morbid matter of each. The former celebrated author also asserts, that there are cases frequently met with where the distinctive peculiarities of the two diseases are so blended that it is impossible to say whether the pains belong to gout or rheumatism.†

The secretion of urate of soda is not confined to gout alone, for Dr. Macleod has shewn that in capsular rheumatism the articular cartilages are seen covered with it. It has also been asserted in diagnosis, that gout is not preceded or accompanied with symptoms of fever. The most accurate observers state the contrary. Dr. Craigie observes, "The patient, if he has not previously been chill, feels cold, and has transitory chilliness, which sensations, however, are speedily followed by heat, thirst, restlessness, and other symptoms of fever." Dr. Mackintosh says, that "the pulse is generally full and hard, and indicates an inflammatory and plethoric state of the system."

The connection between the diseases under consideration and disorder of the urinary system, especially of the lithic acid form and its compounds, has been observed by most, especially Sydenham, Musgrave, Whytt, Murray, Wollaston, Sir Everard Home, and more recent writers, such as Prout, Simon, Bird, and Todd. The latter says, the *gouty diathesis* "is often little more than an aggravated lithic acid diathesis. The lithate of ammonia or even lithic acid in a free state is frequent," and in rheumatism "the urine is scanty, strongly acid, and deposits an abundant sediment, consisting of lithates and purpurates of ammonia; its specific gravity is high, the quantity of lithic acid is increased." With regard to gout, it is often so associated with the urinary disorder, that it is a fact well known, that often when the latter is diminished, the former is aggravated, and *vice versa*. All must have seen a severe attack of rheumatism sometimes pass away after existing a few hours or days, on a copious sediment of lithic acid appearing in the urine. A singular fact connected with the occurrence of rheumatism in a disease where the positive and relative proportions of the ingredients of the urine are greatly diminished, is seen in granular disease of the kidneys, where the patient so affected, if exposed, is peculiarly subject to rheumatic attacks.

Dr. Prout remarks, "*chronic* rheumatism, I have observed, with Dr. Christison, to be a common and very troublesome concomitant of renal affections;" and in reference to the deficiency in the urine just referred to in renal granular degeneration, says, "with respect to the relative proportions of the ingredients, according to my observations in such cases, the *lithates* are most strikingly deficient."* Rayer observes, that the solid matters of the urine in this disease are diminished in quantity, and are found to exist in the blood and serous effusions. Dr. Bird also remarks, "in the two allied affections, gout and rheumatism, exclusive of the many neuralgic diseases popularly referred to the latter, a remarkable tendency to the formation of an excess of uric acid, both pure and combined, occurs. The elements of the acid or its combinations are in these diseases supplied both by the nitrogenized elements of the food, as well as by the changing tissues of the body." As is well known, the urine is always high coloured, extremely acid in both diseases, and voided frequently with pain and scalding. The effect of the irritating qualities of the urine in gout has been known to produce all the symptoms of gonorrhœa, scalding,

* Mackintosh's "Practice of Physic," vol. ij., 501.

† Essays, Physical and Literary, vol. iii.

* Prout, "On Stomach and Urinary Diseases."

discharge, &c.: such has been commented upon by Stoll and Dr. Clerk.* Its density is high, generally between 1.018 and 1.035. The sediment deposited usually consists of the lithates, and with pure lithic acid, a trace of the phosphates and urea mixed in various proportions; and it is to be observed, as Dr. Craigie states, this deposit is not confined to the close or subsidence of the febrile symptoms, though at that time it is more abundant. In nineteen cases of acute and sub-acute rheumatism which I have carefully noted, seventeen threw down a copious sediment of uric acid, on the addition of muriatic acid." Simon writes, "in acute rheumatism the urine is sometimes purple red, its acid re-action strongly developed and bulky with fawn-coloured deposits of crystallized uric acid and urate of ammonia. In eighteen cases which Becquerel examined, the urine he found generally precipitable with acid. Out of thirty-seven cases of chronic rheumatism, the same observer found the urine in seventeen assume the inflammatory type. The lithate of soda concretions exist sometimes in almost every part of the body; they have been found extensively in the calyces of the kidneys, as also upon the skin. Dr. Bird narrates a case of rheumatic gout, where the legs, which were affected with eczematous eruption, were frosted with microscopic crystals of urate of ammonia.† One or two writers state that they have found lithate of soda in the deposits that occur in arteries and on the valves of the heart; and Dr. Todd asks, whether they may not frequently be of the gouty kind? Mackintosh, in referring to gout, makes the following (for the theory,) apt remark:—"It is the universal belief of those who have either seen the disease or experienced its sufferings, that a gouty paroxysm clears the system of something which had been acting injuriously upon it for some time.‡"

Sufficient has been said, I deem, to make it apparent that the diseases now under consideration are intimately connected with a superabundant formation of uric acid and its compounds, especially urate of soda, in the system, and I cannot but believe it acts as an exciting cause, showing its results in attacks of gout and rheumatism. If such be true, the physiology of the beneficial action of the phosphate of ammonia is simple when we recollect that this excess of uric acid, which every one allows to exist in these diseases, is, according to Dr. Bird's opinion, first generated pure, and subsequently unites with a base which it meets with, either in the nascent state, or in its progress through the structure of the kidney. The phosphate of ammonia having been introduced into the system, meets with the uric acid, or urate of soda, and becomes decomposed; the phosphoric acid combines with the soda of the urate, forming a most soluble salt. It is thus seen that a most insoluble salt is exchanged for one as oppositely soluble. This, however, is not all the aid we get from it, for this new product, the phosphate of soda, according to the valuable researches of Baron Liebig, has a remarkable effect upon uric acid, inasmuch as he has shown that it has the power of rendering it soluble with facility in water. The before combined uric acid being set free, part unites with the ammonia of the phosphate, and the remainder is rendered very soluble at the high temperature of the body, through the agency of the formed phosphate of soda. Liebig states, "at a higher temperature, the phosphate of soda dissolves a larger amount of uric and hippuric acids than at a lower." The ammonia of this medicine is thus seen to serve a most important purpose in uniting with part of the uric acid, and forming a compound far more soluble than the acid itself, as it is a fact well established by Dr. Prout, that uric acid requires 10.000 parts of water, at 60° for its solution, whereas the urate of ammonia dissolves in 480 times its weight of the same fluid, or, in other words, is more than twenty times as soluble. By these means, the free and combined uric acid existing in the system in these diseases will be dissolved and rendered capable of easy elimination by the kidneys, and the pains, and other distressing symptoms occasioned, as Dr. Prout states, by the derangement going on in those "secondary assimilating processes," by which the nervous substance and immediate appendages, as also the fibrinous portion of the muscles are produced and maintained, will be shortly subdued, and by strict attention to the causes which give rise to that abundance of uric acid in the system, the disease will be altogether checked. If dyspepsia is prominent, and the digestive organs cannot assimilate the usual quantity of nitrogenized food which is introduced into them, it should be lowered, as likewise in those cases where too great a quantity is taken and assimilated, compared to that which the waste of the system requires. Again also, a frequent cause of this deposit exists in the arrest or diminution in the cutaneous excretion, whereby the kidneys act as compensating agents, and the system at large becomes impregnated with this nitrogenized excretion.

As I have previously stated, I have now used this remedy, and with great success, in almost every variety of gout and rheumatism. In acute articular rheumatism I have not exhibited it during its more inflammatory stage; but after this has been subdued somewhat by the usual antiphlogistic treatment, it very speedily relieves the pains, and in the majority of cases prevents fresh joints from being attacked. I cannot speak positively from sufficient data at present, but I am inclined to believe that the chronic form which is not unfrequently left behind from the acute, may often be obviated. I feel convinced I have prevented, by administering this salt prior to the coming on of the

* "Commentarii de Morborum Historia et Curatione."
† Dr. G. Bird, "On Urinary Deposits."
‡ Mackintosh, "Practice of Medicine."

inflammatory symptoms, several times, attacks of gout and rheumatism, and this in individuals disposed to their invasion. In *chronic articular rheumatism*, I have used it after the bowels have been well cleansed by calomel or other purgatives, or if the constitution is vigorous, the vascular action strong, and heat high, after venesection, and I have got rid of these attacks much sooner than formerly. In muscular rheumatism, whether of the acute or chronic form, I have employed this remedy with greater success than in any other. After the action of the intestinal canal was somewhat regulated, I have generally been able, without further preface, to administer it in lumbago, pleurodynia, ischio-gluteal rheumatism, epicranial, (cephalodynia,) cervical, (auchenodynia,) and facial rheumatism. In these I have seen it of peculiar service, and in one case of rheumatic ophthalmia, after the inflammatory spmptoms had been reduced, and the patient was annoyed with the pains about the eye and brow, in which I administered it, it was attended with alleviation and subsidence of the pains within sixteen hours of being commenced. I am not prepared to assert that this salt will prove of benefit in those cases of chronic rheumatism, where the disease has already affected the cellular tissue, bone, or cartilage, and occasioned such appearances of morbid anatomy as have been described by Hasse. It may relieve, but I cannot believe it possibly curative.

With respect to gout, my opportunities of applying this remedy have been less numerous than in rheumatism, yet numerous enough to enable me to speak with certainty of its great value as a remedy; when given in the doses I have mentioned, it produces but little sensible operation beyond that most important of all, the gradual (in two or three cases I have seen it act almost instantaneously,) diminution of the distressing symptoms. With this view I have always prefaced its use by well cleansing out the bowels with proper aperients, and then ordering the phosphate every eight hours in simple water, or occasionally in conjunction with a bitter infusion and spirits of nitre, the best infusion perhaps being that of the serpentaria, as it determines to the skin. Attention both before and during the administration of the phosphate to the due performance of the various functions connected with the primary assimilating processes is of great moment. A slight alterative aperient of mercurial pill and compound rhubarb pill, given every other night, twice or thrice, has answered well. I have seldom meddled with the inflamed part beyond ordering perfect rest, and exciting perspiration by means of fleecy hosiery or flannel, covered over with oil-silk, occasionally a light anodyne poultice or narcotic fomentation, and of course a consistent diet, and abstinence from every thing irritating both of body and mind, were points duly remembered. In the third case in which I employed the salt, it was strikingly beneficial. A poor man, a dispensary patient, a very gouty subject, had had an attack for two or three weeks, being confined wholly to his bed or arm-chair. He had tried, and I had previously used, most of the most renowned remedies, with little or no relief. On a Wednesday afternoon he commenced taking the phosphate of ammonia, (ten grains every eight hours,) and on the Friday morning following he attended me at the dispensary, walking each way, and informed me he had lost all pain, and that the swelling and stiffness were rapidly subsiding. To use his own words, "the second dose of this last mixture had acted like a charm." On the Tuesday following he began his work again as a mason. I ordered his continuance for a short time of the salt, combining it with a bitter infusion, and the regular use of a mild aperient.

This latter point of continuing the remedy a short time, I consider a matter of importance, paying at the same time particular attention to the condition of the digestive organs. With regard to the value of this salt as a solvent upon the gouty concretions when formed, my experience does not enable me to speak with any certainty, but my observations lead me to state in a positive manner its powers to arrest the increase, and I believe the formation of them. So great is the solvent action of the phosphate of ammonia, after being introduced into the system, upon uric acid, that I am almost inclined to think calculous disease of that nature may be very greatly benefitted by its employment. It is worthy of consideration when we remember the frequent occurrence of uric acid calculi, and the fact that most others of different character have uric acid for their nucleus. In lithic acid gravel I have frequently used it, and experience has taught me that it causes a very rapid decrease and disappearance of the red crystal-line sediment; it quickly reaches the urine, (as I have testified oftentimes upon my own person,) when largly diluted. Mr. Alexander Ure* has recommended the benzoic acid for the same purpose. I have used it many times, but never with so marked a result as with the phosphate of ammonia. Dr. Garrod has stated, and his statement has been confirmed by Dr. Booth and Mr. Boyer, of Philadelphia, that uric acid is unaffected by the conversion of benzoic acid into hippuric acid, the urea alone being diminished.

It was my intention to have recorded at the termination of these remarks, the clinical experiments I have made with this salt upon gout and rheumatism, together with the cases which have been the foundation of this paper, with a chemical and microscopical detail of all particnlars; but I fear I have already detained the Association too long, and must therefore reserve these particulars until a future occasion, merely remarking in conclusion, that the employment

‡ Med. Chir. Trans., Vol. xxiv.

of this or any other solvent which may be suggested, although it may relieve, is not the curative agent. For this we must go deeper into the causes, and attend to the pathological condition of those organs principally concerned in the primary assimilating processes upon which the excess of uric acid and its compounds I believe chiefly depends. I would not on this account depreciate the value of such a medicine as the phosphate of ammonia; on the contrary, as you have seen, I hold it of the highest value in lessening irritation and the urinary formations, at the same time that we are endeavouring to remove the primary cause of the deposit. Both of course are points of the highest importance in our treatment, and should be remembered as such.

20, Walcot Parade, Bath,
September, 1847.

CASE OF GENERAL ANASARCA;

TREATED BY DIGITALIS, GRADUALLY INCREASING THE DOSE TO THE FULLEST EXTENT.

By DONALD M'DONALD, Esq., M.R.C.S., Tiverton.

On August 14th, 1847, I was consulted by Mr. T. P., aged 56, for general anasarca. He has been for many years occupied in agricultural pursuits, but his circumstances of life never required his exposure to vicissitudes of temperature. He states that he has been inclined to corpulency for some years. His habits have been rather those of a *bon vivant*, although he never greatly indulged in the use of alcoholic drinks. He has become moderate in his living since the commencement of his illness, (about two years,) in fact he has been quite obedient to the instructions set down by his medical advisers.

I found him in the following state:—Tumultuous action of the heart; frequent pulse; sense of weight and oppression in the region of the heart and epigastrium; dyspnœa at times very severe, amounting to orthopnœa; extreme difficulty (indeed an almost impossibility,) in mounting a hill; flatulence; frequent syncope; countenance with a distressed expression; anasarca general. The infiltration through the lower extremities was so great, that had not the remedies taken immediate effect, I should have had recourse to puncture on the morning of the 3rd day; bowels regular; urine very scanty, depositing a red sediment. The cause of the anasarca, (agreeably to the symptoms above given,) was disease of the heart and valves. Upon applying the stethoscope the following signs were revealed:—Murmur distinct to the right of the mesial line; distinct purring tremor. A *bruit de soufflet* attended the least exertion. In addition to these signs there was general venous congestion of the surface, more particularly the face, lips, neck, and hands. The jugular veins were much dilated and pulsating synchronously with the heart. My diagnosis was this:—Induration of the tricuspid and mitral valves, the latter to a less degree, and hypertrophy of the left ventricle. This state of things will therefore satisfactorily account for the supervention of anasarca. I will just mention that he had given himself up to die some days before consulting me, from having experienced no relief from several members of the profession, under whom he had consecutively placed himself, and from the firm conviction that he was rapidly sinking and far beyond all aid.

August 14th. As I mentioned above, this was my first day's attendance. I ordered him:—

R. Pil. Hydrarg., Pulv. Scillæ, utrq. gr. iv. M. Fiant, pil. ij., hora somni sumendæ.

The liver being somewhat at fault, the above was prescribed to ensure a supply of proper bile.

R. Tinct. Digitalis, m. xv.; Potassæ Acetatis, dr. j.; Sp. Juniperi Co., dr. ij.; Decoct. Scoparii Co., dr .xiv. Fiat haustus bis quotidie sumendus. Animal broths twice a day. A little gin and water at night.

15th. Rept. pilulæ. Rept. haustus cum Tinct. Digitalis, m. xxv., bis quotidie. Diet, &c., as yesterday.

16th. The patient this day stated that he felt better *already*. He said, to use his own expression, that he was not "so stiff."

Omittantur pilulæ. Rept. haustus bis die, cum Tinct. Digitalis, m. xxv.

17th. The swelling manifestly reduced; can fasten his boot-strings a little, which he has not been able to do for many months. Urine increased from a pint to a pint and a half during the night.

Rept. haustus, (bis in die,) cum Tinct. Digitalis, m. xxx. Diet, &c., as before.

18th. Swelling still reducing; urine increased to a quart last night; says he feels quite a new man; breathing much relieved, and he is altogether easier and more comfortable.

Rept. haustus, (bis die,) cum Tinct. Digitalis, m. xxxv.

19th. Urine and swelling in *statu quo*. I increased the Tinct. Digitalis, m. x., this day, making m. xlv. in each draught. Diet &c., as before.

20th. Three pints of urine passed during the night; swelling much abated; he states that he can move about much better, and ascend the stairs with very little trouble.

Rept. haustus, (bis die,) cum Tinct. Digitalis, m. *l*.

21st. Fully under the influence of the digitalis. Complains of headache, dimness of sight with muscæ volitantes, and feeling of syncope. Has passed during the night at least two quarts of urine; swelling nearly gone, scarcely any *pitting*; he is now able to fasten his shoes tightly. His clothes hang about him in bags to such an extent, that he is obliged for common comfort, to have them *much* drawn in. From his feeling so weak this day, I ordered him—

R. Sp. Ammon. Arom., Tinct. Cinchonæ Co., utrq., dr. j.; Mist. Camphoræ, dr. x. M. Fiat haustus quintis horis sumendus. Two glasses of wine and boiled mutton.

22nd. Effects of the digitalis still remaining. Rept. haust. ut heri quintis horis sumendus. Diet &c., as yesterday.

23rd. Effects of the digitalis rapidly passing off; serous infiltration has totally gone, and as regards his general appearance, he states that he is just the same as he used to be when in perfect health. He can

mount the stairs with facility, and begins now to take daily exercise out of doors.

Rept. haustus quintis horis. Diet, &c., as usual.

24th. Great improvement. To continue as yesterday.

27th. The accounts are highly favourable.

September 3rd. My patient states that he can now do without me, feeling "*quite well*, and his heart more quiet than it has been for the last two years." I simply ordered him the following:—R. Pil. Rhei Co., gr. vj.; Pil. Scillæ, gr. iv. M. Fiat pil. ij., hora somni bis in hebdomade sumend. R. Quininæ Disulph., gr. iss.; Acid. Nitro-Hydrochlor., m. v.; Tinct. Cascarillæ, dr. ij.; Aquæ Distillat. dr. x. M. Fiat haustus meridie quotidie sumendus.

In conclusion, allow me to observe, that many parties may say that there is nothing new in the use of digitalis in anasarca; neither is there certainly, but I maintain that its great good (*and which has not been sufficiently observed,*) is, by gradually increasing the dose *every day*, (*narrowly watching the patient at least three times* in the 24 hours,) and carrying it to the *greatest possible extent,—i. e.*, until muscæ volitantes, and the other symptoms of poisoning from the drug, *unequivocally* make their appearance. I, moreover, maintain that this mode of treatment is far preferable to the one by hydragogue cathartics, the depressing effects of which, upon a constitution previously much shattered by disease, not unfrequently produce (as I have more than once witnessed,) fatal results.

CASE OF SPASMA GLOTTIDIS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

Sir,

I am induced to send you the following case for publication, from having read in the number of the Journal which has just reached me, (No. XX., October 6th,) two similar cases of this not very common disease, (at least, as far as grown-up persons are concerned,) communicated by Dr. Wardell. The remarks of that gentleman, which accompanied his cases, are corroborated very fully by the present case, and as they must be still fresh in the memory of most of your readers, I will content myself by merely relating the case as imperfectly copied in my note book at the time.

I am, Sir,

Your obedient servant,

W. J. GORRINGE, M.R.C.S.E.,

Assistant Surgeon to the Royal Cornwall Infirmary.

October 28, 1847.

Caroline Sampson, aged 25, from the parish of Illogan, was admitted under the care of Dr. Carlyon, at the Royal Cornwall Infirmary, on the 29th of July, 1847; of middle stature, slight make, dark hair and eyes, and rather of chlorotic appearance.—*History:* States that she has been suffering from difficulty of breathing for more than twelve months; that it is getting worse daily; is not aware that she caught cold about the time of its first troubling her, but states that it came on suddenly, accompanied with a crowing noise and a dreadful sensation of suffocation. She was bled from the arm, blistered on the chest, and medicines were administered, with only temporary relief. From this time she has never regained her usual voice, and is subject to frequent paroxysms of dyspnœa. The catamenia has been irregular for two years, and for the last five months never appeared at all.—*Present Symptoms:* Eyes suffused; countenance anxious, and expressive of great suffering; answers questions only in a low whisper; breathing performed with the greatest difficulty, and accompanied with a crowing noise, so as to be distinctly heard in the adjoining room; a sensation of tightness across the upper part of the chest; pulse small and quick; skin hot and moist; bowels confined.

Applic. Hirudines sex gutturi; et postea Cataplasma Lini. R. Calom., gr. v.; Conf. q.s. Ft. pil. hac nocte. Haust Sennæ Co. cras mane.

30th. Leeches bled freely; bowels acted twice; breathing exactly the same; complains of tenderness along the spine when pressed; urine natural.

Applic. Empl. Cantharid. gutturi. R. Tinct. Valer. Am., Tinct. Ferri Am., utrq., dr. ss., ter die ex. Aq. Menth. Pip., oz. iss.

August 7th. Gone on much the same since last report; no amendment. About 6 p.m. I was called to her, the nurse stating that she was in a fit. I found her stretched at full length on the bed; her arms and legs perfectly stiff; the face crimson, and eyes riveted on the ceiling; the breathing painful in the extreme, and the croup-like noise louder than I had ever heard it before. Some cold water was dashed upon her face, and after a few minutes a deeper inspiration followed, and ended the paroxysm. As soon as she was a little tranquil, I gave her the following draught:—

R. Sp. Æth. Sulph. Co., dr. ss.; Tinct. Opii, dr. ss.; Sp. Am. Co., m. xx. M.

9th. She became more tranquil, and slept after the draught of last evening, and this morning the breathing is freer, but she complains of violent pain over the dorsal vertebræ, increased on pressure, and painful also if the integuments only are pinched. Dr. Barham saw her to-day in the absence of Dr. Carlyon, and ordered flannels, wrung from hot water, and then dipped in turpentine, to be applied to the whole length of the spine.

Auge Tinct. Ferri Ammon. ad. scr. ij.

10th. The flannels with turpentine &c. were applied until smarting and redness were produced, but with very little relief to the pain. To be repeated night and morning. Continue the mixture.

15th. Breathing much in the same state; has had no paroxysm since; noise still audible all over the room.—*Physical signs:* Stroke-sound perfectly clear over the chest, before and behind. The stethoscope detects nothing wrong more than increased respiratory murmur, but when placed over the neck a loud whistling noise is heard; the sounds of the heart are normal, but the impulse is rather too great; tenderness over the spine increased in extent and degree.

To have a cataplasm of linseed meal, made with a solution of opium, applied to the whole length of the

spine. Two ounces of red wine daily. Continue the mixture.

20th. Very little alteration; speaks only in a whisper; has had one paroxysm since last report, about the same time in the evening as the last, after which she slept soundly, but the extremities this time were convulsed; bowels confined.

R. Pil. Aloes cum Myrrha, scr. j.; Pil. Galban, Co., scr. ij.; M. Fiant pil. xij., j simul ac mist.

24th. Bowels now in a regular state; no fit since; breathing the same; back exceedingly painful, so that her clothes cause her pain when dressed; passed no urine for sixteen hours.

Cucurb. Cr., lumbis ad oz. iv. R. Potass. Nitratis, gr. x., ter die e Dec. Lini, oz. ij. Cont. pil. Omitt. Mist. Valerianæ, &c.

25th. *Catamenia present this morning*, but very slight; urine now natural; and pain in the back much relieved; the breathing also is materially improved.

September 4th. Continues to improve; breathing scarcely audible until you come to her bedside; no mention made of pain in her back now. The catamenia lasted only one day.

18th. The improvement has gradually progressed since last report until this evening, when she had a violent attack of dyspnœa, similar to the last, with convulsions of the extremities, (these attacks have always occurred about the same hour,) it was followed by pain in the back.

Electro-magnetism to be applied along the spine, and from the sacrum to the pubes, every morning.

26th. Since last report the electro-magnetism has been applied daily, and this morning the catamenia again appeared, with relief to the back and breathing.

From this time she continued to improve rapidly; the catamenia lasted three days, and when discharged her voice was only a little hoarse, but her breathing quite natural.

CASE OF SPASMA GLOTTIDIS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The following case may perhaps be interesting to some of your readers, in connection with those related by Dr. Wardell, in a recent number of the *Provincial Journal*.

I am, Sir, your obedient servant,

RICHARD ALFORD.

Tewkesbury, October 26, 1847.

W. R., farmer's servant, aged 21, a strong healthy-looking person; has always enjoyed good health.

Oct. 15th. This morning at six o'clock, I was called in great haste to him. His friends informed me that he was very well until just before they sent. He had not been to bed, but had staid up all night with them previously to going to his place as a servant, and just as he was leaving the house with his bundle, he suddenly complained of difficulty of breathing, and was "taken in a fit." On my arrival he was seated on a chair, and unable to speak, but so far sensible as to point to his throat. His uvula was inflamed and much elongated, and there was considerable redness of the fauces, but the tonsils were not enlarged; he had not however complained of being unwell. On passing my finger into his throat, no foreign body could be detected at the rima glottidis, and I concluded that the inflammation had extended from the fauces to the larnyx. The symptoms were most urgent; he made violent efforts to breath, but inspiration was only occasionally effected, attended by an audible sound, and his whole frame was thrown into contortions, then followed an interval of repose. The pulse was slow and laboured, and the whole aspect showed evidence of threatened suffocation, so urgent that I felt much disposed to open the trachea, fearing immediate choking. I endeavoured to make him sick by putting my finger in his throat, and giving him mustard and water, (the latter he could not swallow,) but without success. I then bled him in the arm, but the pulse soon sank, and not more than about ten ounces of blood were taken, though with evident relief.

R. Ant. Potass. Tartr., gr. iv.; Tinct. Opii., dr. ss.; Aquæ, oz. iss. M. Sumat dimid. statim et rept. post semi-horam

8 a.m. Has vomited freely; breaths more easily, but cannot speak.

R. Antimonii Potass. Tartr., gr. xii.; Pulv. Ipecac. dr. j.; Aquæ, oz. vj. M. Sumat coch. magna. semihora quaque.

11 a.m. Sent for in great haste; found him gasping for breath. Venesection to twenty ounces. Hirudines vj. gutturi. Continue the mixture, and let a pint and a half of gruel be given in an enema.

1 p.m. Better, but still suffers from paroxysms of dyspnœa at intervals, though less violent than in the morning. No action of the bowels. Repeat the enema. Continue mixture occasionally when the dyspnœa becomes urgent. Has vomited freely and brought up a good deal of mucus, and some bile, &c.

Calomel. gr. vj. statim. R. Calomel., gr. xvj.; Pulv. Doveri gr. xii. M. Divid. in pulv. iv.; sumat j. quartis horis.

Vespere.—W. R. has gradually progressed since the last report, and now breathes quietly, and has a moist skin; he can also speak, though not more than a word or two at a time.

16th. 7 a.m. Has had one or two attacks of dyspnœa in the night, but is decidedly better this morning, and has slept calmly at intervals; bowels not open; the second enema was not given. Ordered two cathartic powders, with a drop of croton oil in each; one immediately, and to be repeated in two hours if required.

11 a.m. Has taken both powders, and the bowels are well relieved; in every way better.

Vespere. Complains of pain in the bowels, which I ordered to be fomented; in all other respects going on well.

17th. Slept well and says that he is now "quite well." The poor fellow seems very grateful.

R. Potass. Nit.r, dr. j.; Pulv. Ipecac., gr. vi.; Tr.

Camph. Comp., dr. j.; Aquæ, oz. vj. M. Sumat coch. ij. magna. ter die. Mild diet.

18th. From this time W. R. soon recovered. I kept him a close prisoner for some days, and applied Argenti Nitras to the uvula, which was ulcerated at its free end.

Remarks.—This case forcibly illustrates the value of tartar emetic in affections of the larynx. Vomiting always affords relief; and the prostration occasioned by the combined effect of bleeding and tartar emetic subdues inflammation and relaxes spasm. The mercury was of course a precautionary measure, to keep up the anti-inflammatory action, and check effusion, &c., but in these very urgent cases tartar emetic is the sheet-anchor.

CASE OF AMPUTATION OF THE ARM, PERFORMED UNDER THE INFLUENCE OF ÆTHER: ABNORMAL DISTRIBUTION OF THE BRACHIAL ARTERY.

By Charles Anderton, Esq., Surgeon, Leigh, near Manchester.

September 21, 1847. In company with my very worthy and intelligent friend and professional neighbour, Mr. Manley, and his son, I removed the arm of a poor scrofulous girl, of the name of Margery Meadows, aged 15 years.

She laboured under strumous degeneration of the elbow-joint, of three or four years standing. The joint was enormously enlarged, with a multitude of orifices penetrating its surface, whence flowed pus, mixed with a fluid resembling synovia. The catamenia had not appeared.

We commenced by administering æther per inhalor, which was superintended by Mr. Edmund Manley, a student at the Manchester School of Medicine and Surgery, with considerable tact; but, owing to the strength of the æther, and the somewhat imperfect state of the instrument, (although a new one,) her glottis became exposed to too intense a stimulus, giving rise to repeated convulsive expirations, in the shape of short rapid coughs. Notwithstanding these little embarrassments, the specific properties of the æther became manifest, after respiring for three or four minutes. I then immediately commenced the operation by "circular incision," and the division of the integuments was completed without the least indication of pain on the part of the patient; but immediately the knife was applied for the division of the muscles, the patient began to scream, and obviously to feel intensely, and this she continued through the remainder of the operation.

I ought to observe, that I conceive the effects of the æther did not protect the patient for longer than *one minute*. From the profound cerebro-spinal torpor which the æther appeared subsequently to occasion, in the dilated pupil, laboured and feeble pulse, cold perspirations, suspiratory respirations, collapsed muscular fibre, &c., I should feel a great degree of hesitation, on any future occasion, in administering the æther, more especially in weak and lymphatic subjects, like the one under consideration.

After completing the operation of removal, we discovered, to our surprise and embarrassment, that there was an abnormal distribution of the brachial artery, the only vessel requiring ligature being a small (not larger than a terminal,) branch of the superior profunda, on the *external* side of the bone!! On examination of the face of the stump, there was a forcible pulsation in the normal situation of the brachial, which, on tracing, appeared to take a circumflex course anteriorly.

Under these (to our minds not very safe,) circumstances, we did not feel justified in bringing the edges of the stump together immediately, from a fear of secondary hæmorrhage. We therefore cautiously loosened the tourniquet, until all restraint upon the vessels was removed, and left the stump exposed for two hours, but without the least indication of hæmorrhage, although the whole of the vessels over the face of the stump appeared all in forcible activity.

As it is unnecessary as uninteresting, to give the daily report of the case, permit me to say, that the stump, on this, the 13th of October, is perfectly cicatrized, without the least unfavourable symptom or appearance of hæmorrhage, from first to last!! Is it possible that in this case the brachial artery could have been obliterated by disease?

CASES FROM PRIVATE PRACTICE.

By John Richard Wardell, M.D., Edin.;

Late President of the Royal Physical and Hunterian Medical Societies, Assistant Pathologist in the Royal Infirmary, Edinburgh, &c. &c.

(*Continued from page* 503.)

The treatment of puerperal convulsions has unquestionably received the greatest improvement from the more correct opinions which have in recent times been formed of its special pathology. It is now unanimously admitted by all who have had sufficient experience in the affection to entitle their decision to respect, that all means are secondary and inferior to copious general blood-letting; indeed the lancet is our main dependence. The great fatality of former times it is now evident, was on account of the timid and ineffectual manner in which they employed this, when energetically used, potent remedy. A small blood-letting is of no use whatever; we must open the vein by a large orifice so that a full stream be emitted, and when the blood is not freely abstracted from one arm, we should open the veins of both, or bleed from the jugular vein. The last-mentioned method however, is less to be recommended, than the preceding, owing to the dangers necessarily associated with having recourse to that operation, from the restlessness and constant tossing of the patient. It may be requisite to abstract twenty, thirty, and even forty ounces, at one bleeding, and it sometimes happens that fifty or sixty may be drawn in the course of three or four hours. In the case now given, thirty-five ounces were taken at the first bleeding, and twelve more afterwards,

making the total loss of blood in three hours, forty-seven ounces, exclusive of what was soon after taken by the leeches. There is no disease in which we can with advantage bleed more heroically than in this. Her pulse was not particularly accelerated, but it felt strong and forcible beneath the fingers; and it is in such cases that we can well nigh always bleed freely with benefit. From the quick succession of her fits, the entire insensibility during the short intermissions, the violent manner in which she was convulsed, the swollen livid turgidity of the features, the loud and difficult stertorous breathing, and the great prostration which succeeded each paroxysm, it is highly probable, that unless the vascular pressure on the great nervous centres, had been speedily relieved by a full emission of blood, such disorganization would ere long have ensued as to usher in a mortal issue. Cupping behind the neck has by some been recommended, and if used in conjunction with the lancet, there can be no question as to its utility, but at the time when depletion is most required, it would be folly to temporize with cupping—besides, where convulsive paroxysms might return at any moment, there would be much danger of the glasses being broken. Afterwards this method is much to be commended. Leeches are too tardy in their operation for much reliance to be placed upon their employment, but may subsequently with propriety be used to the temples. A dozen were applied in the case of this woman, and it is probable they were of service, because, by whatever means we lessen the volume of blood in circulation we are acting according to correct principles.

Respecting the use of opium, there is and has been a good deal of discrepancy of opinion; by some it has been much extolled, by others highly condemned. From its employment in this case, there are reasons for believing that when properly administered, that is, AFTER the copious abstraction of blood, it is of great utility. It would be as improper to give a large dose of this drug before bleeding, as it would be in a case of sero-enteritic inflammation,—the one should precede the other. When we reflect upon the nature of the disease, review the most rational notions entertained respecting its pathology, and remember that whatever other conditions enter into its causation, that peculiar state, which for the want of a more precise and definite phraseology, we term irritation in the great nervous centres, either primarily existing in themselves, or transmitted by the incident spinal nerves, is the great and acknowledged cause from which the other phenomena proceed, such agents as lessen the morbid sensibility of the nervous system will, it is fair to presume, be of service. In delirium tremens, unquestionably allowed to be the result of morbid excitation, sedatives are of essential service, indeed on opiates we place our chief reliance. In certain forms of mania, and where the nervous system is morbidly susceptible of impressions, the same class of remedies are decidedly beneficial. It may be urged that very large doses of opium are apt to produce visceral congestion, but this is less the case when the cerebro-spinal system is labouring under preternatural excitation, and when depletive measures have been efficiently premised, and it is only after such that it is now recommended. The cases in which opium subsequent to bleeding, is most serviceable, is in thin and hysterically-inclined females, with whom has previously existed a preternatural mobility of the nervous system; but even in these it must not for a moment be inferred that it is recommended to supply the place of the lancet, but as an assistant remedy, because under all forms blood-letting is our sheet anchor. A few grains of calomel may advantageously be administered at the same time, because the biliary apparatus is often disordered, and it is desirable to emulge the liver and correct the secretions.

The next question that naturally arises is,—are we to deliver, and how? It is the great efforts of the uterus, those powerful actions which are induced in its expulsive essays, which develop the affection, whatever may be its prime origin, and as the fits return with the regularity of the pains, it is obvious that such pains act as excitants, and if the uterine contents were expelled, and the efforts of the organ to cease, the cessation of the pains would tend to avert or defer the convulsive paroxysms. A pain comes on, the expiratory muscles for some time remain in a continuous fixity, the glottideal fissure becomes closed, the blood imperfectly aërated is sent with increased force and quantity to the brain, the vessels proper to that organ become distended, and pressure and the convulsive paroxysms in consecutive order succeed. But when the uterus is emptied of its contents, and thus its expulsive efforts almost or entirely abated, it seems quite conclusive that the convulsions will not be so likely to return in such quick succession. The delivery I am aware frequently does not cut short the paroxysms, nor prevent their return, and in the instance now presented there were fits after the child and secundines were born; but what is now contended for is, that during their continuance they may be less severe, and their succession not so frequent. Again, the child is, in the majority of instances, dead, another reason in favour of emptying the womb. The manner in which the delivery should be accomplished, entirely depends upon existent circumstances. If the head should be so far descended as to be within the reach of the short forceps, this is our best and most expeditious mode of procedure; if it should be above the brim, the long forceps may be tried, and if these modes are unavailable, we must turn and deliver according to the ordinary method. Malformations of the pelvis might of course demand the operation of craniotomy. In the instance of Ann W—— the membranes were entire, and the os so far dilated, that with care the hand could be readily admitted. Placing the

patient on her left side, the hand was introduced, and the feet easily brought down. Sometimes it happens that the os is not sufficiently dilated; we may in such cases artificially distend. Although this woman was delivered as quickly as possible, the child was dead.

It is a point much contested by physiologists as to the manner in which the death of the fœtus takes place, whether it be by the inquinated state of the maternal blood, the venoid and impure condition of which is evinced by the facial lividity during and subsequent to the paroxysms, or whether it be destroyed by the operation of similar radical causes to those which obtain in the mother. It is highly probable that the shock which must necessarily be given to the fœtal nervous system, would exert upon it a most powerful, if not mortal, impression, whilst a degree of obstruction given to the circulation and a vitiated state of the blood, seem at once sufficient to account for its destruction. The child of this person, on being born, was extremely livid, presenting evident marks of obstructed circulation.

To properly unload the bowels is of essential importance, and this can best and most readily be done, as regards the colon, by means of a large injection. In this case an ounce of turpentine was added to a quart of starch gruel; and from experience in similar affections, the addition of the former is a valuable adjunct, often being followed by very good effects. The bowels were reported to have been pretty well moved but a few hours before, yet it seemed desirable to administer the enema in order to thoroughly clear out the larger bowels; and on reference it is said that a considerable quantity of fæculent matter was discharged. A pretty large dose of calomel was given to act upon the liver, and superior portions of the canal. We may give with advantage five or six grains of calomel, and afterwards one or two table-spoonfuls of castor oil, or a dose of senna and salts, every two hours, until free evacuation is produced. When the bowels are obstinately constipated, one or two drops of the croton oil, in a drachm or two of castor oil, will be found very efficient, and fully to answer the purpose intended. Some writers have, perhaps, laid more stress upon the employment of cathartics than appears desirable, because when considerable irritation is thus induced along the digestive mucous surface, might not such, according to the theory previously maintained, be liable to act as an excitant to the paroxysms? Cold applications to the head should sedulously be used; bladders of ice or spring water are, perhaps, the best. There being a fall of snow on the ground when this case occurred, it was ordered that a quantity should be constantly applied to the head, and there is little doubt, that as an auxiliary, it was of much utility. In those instances where there is considerable cerebral vascularity, in connection with hot skin, and quick pulse, pouring a stream of cold water over the scalp is followed by very beneficial effects, and it is beyond a doubt that this mode of treatment, which the French and other continental physicians so justly extol, might with advantage in this country be more frequently had recourse to; in fever I have known the practice often succeeded by the best results.*

Counter-irritation along the course of the spine and to the extremities was adopted, and with apparent success. There is no plan more suitable or efficacious to produce this than the common mustard plasters; they may be made entirely of mustard and hot vinegar, when they act readily and efficiently. The strong liquor of ammonia is available for the same purpose, but perhaps on the whole, the former are preferable. These may be followed by blisters to keep up the action should the case be persistent. Medicines to act on the skin and kidneys were prescribed; these were the solution of acetate of ammonia and the spirit of nitrous æther. During convalescence a weak infusion of columba was taken as a tonic.

It may be observed, that in the report of the 14th February, her sleep is said to be much broken She would awake from her short slumbers with a sudden start and for a time be alarmed and agitated, whilst there would be much palpitation of the heart. These symptoms are of course dependent upon the sudden and copious loss of blood, which we know to be generally sequelæ to large losses of blood, as in uterine hæmorrhage, etc. Dr. Marshall Hall has proved from certain experiments on the lower animals, that considerable and sudden loss of blood gives rise to great nervous excitability, that the action of the heart on the least cause of agitation, immediately becomes preternaturally excited, and there is generally a distinct bruit. In this case the murmur was anticipated, but on applying the stethoscope, nothing more was audible than the second sound being unusually quick, smart, and clear, giving evidence of a certain degree of morbid excitation. The digitalis and morphia in conjunction with an improved diet, fully answered the purpose intended, and as the patient gained strength these symptoms readily vanished.

In conclusion to the foregoing remarks it may be said:—1st. That puerperal convulsions are dependent upon irritation in the great nervous centres, and such may primarily exist in these themselves, or be communicated by the afferent nervous filaments, the latter being far more frequently the case than the former, and that such morbid impressions are intimately connected with the pregnant condition of the uterus, and that the expulsive efforts of the organ develop the morbid actions of the brain and spinal marrow. 2ndly. That a disordered state of the bowels, together with mental depression and morbid excitability of the

* See No. XI. of a series of papers on fever, by the writer of this article, now publishing in the *Medical Gazette*.

nervous system powerfully predisposes to the affection. 3rdly. That the means of treatment most rational, and in accordance with physiological and pathological deductions, is first to relieve vascular turgescence, which gives rise to pressure in the brain and spinal marrow, and then, if possible, to remove or mitigate the primary source of irritation, as by emptying the uterus, etc. 4thly. That the copious and energetic general abstraction of blood experience has proved to be the chief measure upon which we rely, and that this mode of treatment has been eminently successful, and considerably mitigated the rate of mortality.

Pickering, Yorkshire.

(To be continued.)

Hospital Reports.

WEST NORFOLK AND LYNN HOSPITAL.

COMPLICATED SURGICAL INJURIES UNDER THE CARE OF CHARLES COTTON, ESQ., M.D., F.R.C.S.,

(*Continued from page* 488.)

FRACTURE OF THE SKULL, UPPER JAW, AND FOREARM; COMPRESSION SUPERVENING ON CONCUSSION; DEATH.

——— Sickling, sailor boy, aged 15 years, is said to have fallen from the fore mast of a vessel upon the deck, a distance of forty feet; was taken up senseless and bleeding at the mouth, but afterwards recovered so as to be enabled to reply to questions, when he was removed to the surgery of a medical gentleman in the neighbourhood, who secured the right fractured forearm in splints, and sent him to the hospital. Admitted 12 noon, September 16th, 1847, and visited immediately by Mr. Cotton. The boy had become insensible and worse on his way to the hospital, and had vomited the contents of the stomach mixed with blood.

Symptoms.—There is very extensive effusion beneath the scalp, over the left fronto-temporal region of the skull, with a quaggy centre, and a feeling of indentation of the bone; the upper jaw in front, is longitudinally fractured, one tooth knocked out, and three others remaining attached to a displaced portion of the alveolar process which is held loosely in the mouth by the gums; pulse weak, 88; surface pale; breathing slow; left eyelid closed and ecchymosed, the pupil widely dilated and fixed; right eye half open, pupil natural and contractile; mouth bleeding freely; lies on his back comatose, occasionally moaning and shuddering, with head inclined to the left side and the left hand directed to the genitals. The slightest handling of the injured parts causes seeming uneasiness and loud screaming. During an examination of the chest and abdomen, he shouted incoherently, turned over on the left side, vomited with great difficulty blood and mucus, became convulsed and appeared for awhile asphyxiated. On his rallying, ordinary styptics failing, it was found necessary to remove the fractured portion of the jaw and the attached teeth, and to apply the actual cautery to restrain a profuse hæmorrhage, which continued from the mouth. The head was also shaved. During these operations he screamed loudly, and unconsciously offered resistance and again vomited blood and mucus. Catheter introduced and a pint of urine drawn off; cold to the head; lint dipped in a strong infusion of matico to be placed under the upper lip, and repeated so long as any oozing continues.

3 p.m. Pulse weak, upwards of 100; breathing stertorous and intermittent; inspirations prolonged; both pupils widely dilated and insensible; surface pallid and extremities cold. Purgative enema thrown up. Hot bottles to the feet.

7 p.m. Moribund.

September 17th. 12, noon. Involuntary escape of urine and fæces once in the night and again in the morning. Pulse weak and frequent, 144; slightly moves when the head is pressed over the seat of the injury; left eye-lid dark and distended, cannot be raised; rigidity of muscles of lower extremities; toes flexed; irritating the soles of the feet excites weak reflex movements and slight general shuddering; powers of life ebbing.

Consultation. The use of the trephine, as a *dernier resort*, was determined upon; a free incision was made, the apex directed backwards; a large quantity of coagulated blood beneath the scalp disclosed and turned out, and three vessels bleeding energetically, secured by ligatures. The bone was found fissured, but no depression existed. The pin of the trephine was fixed in the course of the fissure, and a portion of bone carefully removed, exposing beneath a dark firm coagulum, rising and falling synchronously with the respiratory movements. Another perforation made posterior to the first shewed a part of the dura mater, and the boundary in that direction of the extravasation. No blood escaped through the apertures; the degree of stertor for a moment appeared lessened. The poor boy gradually sank, and died at 4, p.m., having survived the accident twenty-nine hours.

18th. *Post-mortem* examination:—Left parietal bone fissured through the temporal ridge; the left wing and transverse spine of the sphenoid bone loose and separable, the surrounding temporal and orbital connections having yielded; a fracture across the orbital plate of the frontal bone was also found, continuous with one extending behind the ethmoid to beyond the right sphenoidal clinoid process; the dura mater was not torn, but extensively detached; considerable effusion of blood down to the spinous foramen, and through the lacerated foramen into the orbit, pushing outwards the lachrymal gland, the coagulum, six ounces or more, firm and dark, forcibly depressing and indenting the anterior and middle cerebral hemispheres; the source of the hæmorrhage was not distinctly ascertained, most probably from the middle meningeal artery and ophthalmic veins from cavernous sinus. No other encephalic or organic lesion detectable.

This case of compression by coagulum, external to the substance of the brain, shewed so mild a degree of concussion in the first instance, that when sent to the hospital a hope existed that the principal injuries

were those only of the mouth and arm. The quickly-supervening lethargy and state of the pupil soon, however, gave indications of grave and serious mischief, from effusion, or extravasation, or depression of bone; and the vomiting, convulsive shudderings, and laboured and stertorous breathing, shewed how violently the excito-motary system was implicated, and how little was to be expected from surgical interference. The acceleration of the pulse under increasing compression, was a peculiar feature in the case, and was doubtless attributable to the exhausting influence of the bleeding within the skull and that from the mouth. A question arose as to the propriety of trephining on the early accession of the lethargic symptoms; the unpromising state of the patient alone delayed the operation. Had it been performed the result must be manifest, as the *post-mortem* inspection shews that relief to brain pressure could only have been obtained by giving an outlet to effusing blood, and thereby bleeding blood and life away.

(To be continued.)

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, NOVEMBER 17, 1847.

The Quarterly Registration Returns of Health and Mortality have now attained to such importance, that the results developed by them cannot be too generally made known to the medical profession. This will be readily conceded, when it is considered that the population of the districts included in them amounts at this time, in all probability, to not less than seven millions. The pressure of other matter has hitherto prevented us from noticing the last report. We have now to announce, that although the general mortality of the country yet continues considerably more than the average of preceding seasons, there is upon the whole some improvement, and we may hope that the effects of those epidemic and other adverse influences, which have contributed so greatly to the loss of life, and the deterioration of the public health, during the last eighteen months, are now gradually subsiding.

The mortality of the winter months, October to April, 1845-46, was below the average of preceding seasons. From that period until the present time, the mortality has exceeded not only the average mortality of the corresponding seasons, but the actual mortality of any of those included in the Registrar-General's returns. The actual mortality has also increased from season to season until the summer quarter of the present year, since which it has undergone some diminution. In the quarter ending June 30th, a decrease was observed to occur, which is again perceptible in that ending September 30th. The progress of the actual mortality during the period referred to, is as follows:—

Quarter ending	September	1845	36.139
,,	December	——	39.321
,,	March	1846	43.850
,,	June	——	43.734
,,	September	——	51.427
Quarter ending	December	1846	53.093
,,	March	1847	56.105
,,	June	——	51.585
,,	September	——	49.479

The influence of deteriorating causes will, however, best be shown, by taking the differences from the calculated averages. These are:—

Quarter ending	March	1846	—5.359
,,	June	——	— .335
,,	September	——	+9.686
,,	December	1847	+7.311
,,	March	——	+6.025
,,	June	——	+6.745
,,	September	——	+7.007

It will be observed, from a comparison of the two statements, that although there is a clear diminution in the actual mortality, it is not to that extent as materially to lower the excess in the average mortality of the seasons. Causes injurious to the public health are therefore still acting, if not to so great a degree as during the corresponding period of last year, yet to a somewhat greater amount than in the two preceding seasons of the present year. To the effect which the scarcity of the last winter and spring cannot but have had upon the public health, and consequently in increasing the mortality of these periods, and to the fatal fever which has followed in its train, the continuance of this increased mortality is probably in a great measure to be attributed. Accordingly we find, on reference to one of the tables, that in London alone, which has been by no means exposed to this fever so much as some of the northern districts, the excess in the deaths from typhus over the corresponding quarter of last year, amounts to 492; and from zymotic diseases generally, to 827; while the excess from all causes is 778. In Manchester, Salford, and Chorlton, 4154 deaths were registered from all causes; diarrhœa and fever, we are informed, were the prevalent diseases. Let us take the following picture of the dire consequences of a neglect of sanatory precautions:—

"Liverpool, created in haste by commerce—by men too intent on immediate gain; reared without any very tender regard for flesh or blood; and flourishing, while her working population was rotting in cellars—has been severely taught the lesson, that a part of the population—whether in cellars or on distant shores—cannot suffer without involving the whole community in calamity. In itself one of the unhealthiest towns of

the kingdom, Liverpool has for a year been the hospital and cemetery of Ireland. The deaths registered in the four quarters of 1846 were, 1934, 2098, 2946, and 2735; in the three quarters of 1847 ending in September last, 3068, 4809, 5669! The population of Liverpool was 223,054 at the last census. It is impossible to represent more correctly than is done by the short notes of the registrars, the piteous spectacle which this great town presented—with the floating Lazarettos on the Mersey—the workhouses crowded with destitute paupers—the three large "sheds, which will hold 300 persons, nearly full of patients at the present time"—and the fever "getting more prevalent among the upper classes."

It amounts to a blindness, carried almost to insanity, with another pestilence of the zymotic class threatening us, to allow a principal sea-port town, where the disease may be introduced by the next vessel which enters its harbour, to remain for one day in a state so utterly unprepared to meet it—a perfect hot-bed of infection for the whole country. Some of our provincial towns are we observe taking alarm in time, and adopting immediate measures to improve their sanitary condition. We feel assured that this is the most, perhaps the only, effective means yet at our command to lesson the virulence of the destructive epidemic which has now for thirty years, since its first origin in the marshes and jungles of the Ganges, ravaged various parts of the globe. Deeply is it to be deplored that any civilized government or community should fail to authorize and enjoin the adoption of precautionary measures which, it is on all hands acknowledged, are precisely those also required for the improvement and preservation of the general health of all large masses of the population.

Reviews.

Guy's Hospital Reports. Second Series. Vol. 5. London; 1847. 8vo., pp. 212. Plates.

The present volume of these reports, though less bulky than some of those which have gone before, contains several valuable papers. The first is entitled "On some Disorders of the Nervous System, associated with Pregnancy and Parturition." The author, Dr. Lever, excludes from these, as being too extensive for the purpose which he had in view, the subjects of hysteria, convulsions, and puerperal mania, and confines his selection of cases and observations chiefly to chorea, paralysis, and certain aberrations of the nerves of sensation. Several of the cases are of much interest and bear out the following propositions which the author adduces as the result of his observations:—

"1. That pregnancy is occasionally associated with chorea, or convulsive movements; with paralysis of various parts of the body, of the extremities, and of the nerves of special sense; and with mania.

"2. That the varying symptoms of such complications may be produced at any period of pregnancy; but when produced, although modified by treatment, are rarely removed during the existence of gravidity.

"3. That the patients in whom these complications exist, are women of a highly nervous temperament, of great irritability, or whose constitutional powers have been reduced by some long continued but serious cause of exhaustion.

"4. That in the treatment of such cases heroic measures are not to be employed: that the curative means consists in improving the secretions, keeping the bowels free, and administering those medicines, and employing that diet, which will increase the tone and energy of the nervous system.

"Lastly. That although, in most instances, the symptoms will continue so long as pregnancy exists, yet in the majority of cases we are not justified in inducing a premature evacuation of the uterine contents."

The next paper is a description of some "Ophthalmic Cases," by Mr. John F. France. These are,—1. A case of dislocation of the crystalline lens into the anterior chamber, the dislocated lens retaining its transparency for upwards of a month, and indeed until the patient quitted the hospital and was lost sight of. 2. Arrest of development of both eyes, with entire deficiency of the iris in one eye and merely a vestige of it in the other. 3. Paralysis of the conjunctiva and right side of the face, (anæsthesia,) followed by inflammation of the conjunctiva and ulceration of the cornea of the right eye. 4. Strumous ophthalmia. 5. Amaurosis and ptosis, dependent upon some encephalic lesion. 6. Partial paralysis of the left eye with thickening and induration of the fifth nerve of the left side, from its point of exit from the pons Varolii to the Casserian ganglion. The ganglion was also enlarged, and when cut into, was found "very firm, and mottled, with a yellowish semi-transparent infiltration."—"Continuous nervous fibres could be traced through the ganglion, imbedded in, and surrounded by, the infiltration above mentioned, but apparently unimplicated in the disease, save in as far as mechanical pressure might affect them. Examined by the microscope, the fibres seemed to lie surrounded by a stroma of nucleated cells of oval shape, such as are common in scirrhous growths." The disease was considered to be malignant. 7. Amaurosis.

These cases are not brought forward by the author with a view of forming general deductions, but they lead to some interesting observations on the physiology of the nerves of the organ of vision, and in this point of view are worthy of attention.

Mr. Edward Cock describes under the head of "Observations on some Obscure and Difficult forms of Hernia," certain cases where strangulation exists, as the result of a hernial protrusion, which are not remediable by the ordinary operation for hernia. He mentions three forms of this condition. The first

is,—"When by the manipulations of the surgeon or the patient, the peritoneal sac, together with its contents, has been returned through the internal ring, and occupies a position between the internal abdominal walls and the peritoneum." This form has been ably described by Mr. Luke, in the "Medico-Chirurgical Transactions," who, in two cases, suspected the nature of the accident which had occurred, and successfully operated upon them. Mr. Cock refers to another case recorded in the museum at Guy's Hospital, and it is stated that a similar accident was ascertained, by *post-mortem* examination, to have occurred in the practice of a distinguished surgeon, at the Edinburgh Royal Infirmary, many years ago.

The second form described by Mr. Cock consists in "the prolongation of the hernial sac beyond the internal ring, into a pouch of greater or less size, lying on the fascia iliaca, between the internal ring and spinous process of the ilium." Two cases are related by Mr. Cock, and are illustrated by drawings; and a brief reference is made to a third.

The third form is when the hernial protrusion is connected with old standing omental hernia, irreducible from adhesions contracted "with the walls of the sac and the margin of the internal ring, or from a gradual accumulation of fat, which renders it too large and bulky to be returnable through the opening whenever it came down." The leading features of a case of this kind are thus briefly characterized:—"A descent of intestine takes place into a hernial sac, which has existed for a shorter or longer period of time, and which probably contains adherent omentum. It is reduced after the usual appliances, and with the ordinary degree of force. The symptoms remain; an exploration of the sac and canal discovers nothing but omentum; the patient continues unrelieved and dies." The condition produced by the state of the omentum referred to, is this:—"The omentum, after passing down the abdomen, becomes contracted into a firm and unyielding cord as it approaches the internal ring, and entering that aperture, becomes firmly fixed. Thus we have an unnatural band crossing the iliac fossa, and producing a greater or less degree of tension or pressure on the intestines over which it is stretched. The free motion of the intestines is somewhat checked by this band, and from some accidental circumstance, a coil becomes jammed under it, as it were, and is unable to release itself." This accident may occur, as Mr. Cock observes, independently of any recent hernial protrusion, and thus give rise to internal abdominal obstruction, but it is manifestly far more likely to occur in connection with a recent descent of intestine into a hernial sac containing irreducible omentum.

The remaining papers in this volume are,—an account of the dissection of two anencephalous monstrosities, by Mr. Alfred Poland; two cases of dislocation, one of the humerus into the axilla, the other of the radius forwards and upwards, by Mr. Hilton; a case in midwifery, by Dr. Oldham, in which the child was carried to the full period, and at the expiration of the term of gestation the womb remained passive, the process of labour being "literally missed"; the Medical and Surgical Reports of the Clinical Society, from March, 1846, to April, 1847,—the former drawn up by Dr. Robert Finch, the latter by Mr. Samuel Wilks; and another of those admirable select Clinical Reports, by Dr. G. H. Barlow, which have added so much to the value of preceding volumes. This last report consists of cases and observations illustrative of the etiology of enlargement of the heart, chiefly selected to set forth "a certain series of pathological sequences." It does not admit of analysis, but requires to be studied as a whole.

The Dublin Dissector, or System of Practical Anatomy. By Robert Harrison, M.D., M.R.I.A., F.R.C.S., of Ireland and England, Professor of Anatomy and Surgery in the University of Dublin, and one of the Surgeons of the Jervis Street Infirmary, &c., &c. Fifth Edition, with numerous Illustrations. Dublin: 1847. Fcap. 8vo., 2 vols. pp. 871.

The repeated editions which have been called for of this well-known guide to the practical anatomist, at once evince the estimation in which the work has been held, and render unnecessary any lengthened comment on its merits. We may, however, observe, that the present edition is distinguished by the introduction of much new matter, especially in connection with the nervous system, and of numerous illustrative figures, which, are characterized alike by accuracy and clearness of execution. We have much pleasure in recommending the "Dublin Dissector," as a fitting companion to the dissecting room, and as a useful compendium of practical anatomy. It is an esteemed old friend, and not the worse for appearing, as on the present occasion, in new attire.

Proceedings of Societies.

BATH PATHOLOGICAL SOCIETY.

Seventh Meeting.—April 5th, 1847.

Mr. Norman in the Chair.

Case XXXII.—*Headache; various cerebral symptoms; coma; death.—Dissection: A quantity of fluid in the lateral ventricles; the central portions of the brain softened; the pons Varolii softened, and covered with lymph.*

Mr. Norman laid before the Society the details of a case of acute encephalitis; the patient was a lad, 14 years of age, whose previous health had been good. A fortnight before Mr. Norman saw him he had complained of headache, which had been relieved by brisk purging; the pain returned, and was again relieved by the same means. He was first seen by Mr. Norman

on the 11th of March, at which time he was in a sitting room, and complained of pain, though not very severe, in the head; there was no intolerance of light nor redness of the conjunctiva; the pupils were rather dilated, but contracted on the application of light; his vision was so far defective that all objects were presented with a certain degree of obliquity, and sometimes appeared double; there was no strabismus, though it was stated that there had been; he walked across the room alone, but not steadily, and his feet crossed each other as he progressed; the blood drawn from the arm was much buffed. On the following day he was in bed; answered questions, but seemed dull; pupils dilated, but still contractile; had no objection to a strong light; did not complain of much pain; head hot; pulse 80; the next day the right pupil was fully dilated, and did not contract on the application of light; the left pupil was dilated, but contracted under a strong light; he still answered questions, and put out his tongue, but was very testy. By the day following he had become quite comatose; passed his fæces and urine involuntarily. In this condition he continued until the 16th, when he died. He had no convulsions.

On examination after death the sinuses of the dura mater were found to contain a quantity of fluid blood; the veins of the pia mater over the hemispheres were distended; the arachnoid was not opaque; at the base of the brain the pia mater was more vascular than natural, but not to any great degree; the substance of the hemispheres of the cerebrum was natural; the corpus callosum was much distended and softened; the lateral ventricles contained two ounces of clear fluid; the fornix was in a soft pulpy condition; the corpora striata and thalami were soft, and smeared over with lymph; the commissures were so soft as not to admit of division by the knife; the tubercula quadrigemina were soft and flattened, so that no division of parts could be observed; the pons Varolii was covered with lymph, and its substance softened; the medulla oblongata appeared natural; the lobes of the cerebellum seemed softer than usual.

Mr. Norman remarked on this case as presenting some interest on account of the great rapidity of its progress, the patient on the 11th being up, and without any very strongly-marked deviations from apparent health, though he died comatose on the 16th.

Case XXXIII.—*Malignant disease of the eye-ball.*

Mr. Hensley related the following case. There was a cast exhibited. A female servant, 20 years of age, had been for two or three months previous to September, 1846, complaining of weakness and loss of health. She had observed a tumour above the left eye, about the size of a small marble, at the upper and inner part of the orbit. It had, on examination, much the feeling of an encysted tumour. The eye was very prominent, and thrust a little outwards. The sight at this time was not much impaired. For some time the tumour appeared stationary, but early in October it began to enlarge; the skin covering it assumed a livid hue; there was effusion beneath the conjunctiva, which produced chemosis. The eye became more prominent; she suffered great pain in the ball itself, but more in the back part of the head. The tumour continued to increase in size; the cornea separated, and the lens and humours of the eye escaped. In December the other eye became affected, and rapidly increased in size; the cornea separated, and the humours escaped as before. During this time her strength had greatly diminished; she was scarcely able to move in her bed; the pain was most intense, coming on in paroxysms. She often fell into a comatose condition, in which she sometimes remained for twenty-four hours, and was several times thought to be dying, when she would rouse up, call for food, and drink, and make a good dinner, and then in a little time fall into the same comatose condition again. This state continued for about six months, the intervals of consciousness becoming longer towards the close of that period. There was frequently a discharge of blood from the left eye, and a fœtid discharge from the nostrils. She died at the end of January.

On removing the scalp after death, a blueish-looking spot, about one-third of an inch in length, and one-eighth in breadth, was seen at the posterior inferior angle of the right parietal bone. On separating the pericranium, which was easily accomplished, this spot was found to be a hole in the bone, perforating it completely. Around the hole the bone was found to be more vascular than usual, and there were several smaller perforations. The bones of the head generally were very thin; and on holding the skull-cap between you and the light, it appeared translucent, and at many points perforated. The whole of the inner surface, more especially the posterior portion, (the part where she had felt so much pain during life,) was rough, having the feeling and appearance of grains of sand scattered over it. At the spot corresponding to the perforation of the parietal bone, there were several very large Pacchionian glands, and the dura mater was firmly adherent to the bone, and very vascular. There was slight sub-arachnoid effusion. The anterior lobes of the cerebrum were softened and disorganized, presenting a pulpy mass, which could with difficulty be removed from its position. The dura mater around was nearly one-quarter of an inch in thickness, and semi-cartilaginous, and adhered so closely to the bone as to render its detachment impossible. A considerable portion of the orbital plates of the frontal bone, more particularly on the left side, and also parts of the ethmoid and sphenoid bones, were destroyed. The optic nerves appeared healthy; the pituitary body was much softened.

Case XXXIV.—*Gelatiniform cancer of the stomach.*

Mr. Field exhibited the stomach of a man, aged 62 years. He was first seen by Mr. Field on the 6th November, 1846. He had been complaining through the summer, getting thinner and weaker, and losing his appetite. His appearance was cadaverous, his body looking as if almost drained of blood, excepting the nose, which was red, and led to the idea that he was a man of intemperate habits, which, on subsequent enquiry, proved to be the case. His pulse was weak, not much accelerated; tongue clean at the edges and tip, with a streak of white fur in the centre; no

vomiting, but at times a feeling of nausea, and rising of bitter mucus in the throat. There was a very unpleasant odour from the mouth; the bowels were sluggish. On examining the abdomen, there was found, to the left of the epigastrium, a hardness, of the size of the hand, below the cartilages of the false ribs, not painful on pressure. About five weeks before his death, which took place on the 18th of March, 1847, ascites supervened, but not to any great extent.

On examination after death there was found a number of tubercles in the cellular membrane under the skin of the abdomen, some were as large as small horse-beans, but the majority were of the size of small split peas: they were found nowhere else. The cavity of the abdomen contained about two quarts of serum; the stomach was adherent to the under surface of the liver; a number of tubercles were under its peritoneal coat, and between the layers of the omentum majus and minor; the coats of the stomach were much increased in thickness, especially towards the cardiac extremity. On laying it open the mucous coat was found ulcerated in the neighbourhood of the cardia, but the pylorus was free; the cavity of the stomach was much diminished in extent, and presented on the whole a well-marked specimen of gelatiniform cancer. The intestines were natural, and the liver healthy; the kidneys pale and flabby; the spleen and pancreas were softened, the latter having a few carcinomatous tubercles on its upper border. The heart was found atrophied with patches of ossification in the coronary arteries; there were several patches of lymph under the pericardium, one especially at the apex, which presented a suspicious appearance; there were a few cretaceous tubercles at the apex of the right lung.

Mr. Field remarked on the following points in the case as presenting some interest:—1st. The tubercles under the skin of the abdomen; they might have been useful in diagnosis, combined with the hardness in the epigastrium, but unfortunately were not observed during life.—2nd. The absence of pain and vomiting. Might the former in some degree be referred to the affection of the heart? A circulation so weak might probably modify sensibility. As there was no difficulty in the exit of the contents of the stomach, and as its coats were so thickened and rigid, vomiting would not be likely to occur.—3rd. The co-existence of cancer and tubercle. There could be no doubt that the cretaceous masses in the apex of the right lung were transformed tubercles. This co-existence has been observed before, though not of common occurrence.

CASE XXXV.—*Corroding ulcer of the uterus.*

Mr. Boult exhibited a specimen of corroding ulceration of the uterus, which occurred in a woman 52 years of age. She had not been under Mr. Boult's care, but it appeared that she had enjoyed tolerably good health during the greater part of her life; she had menstruated regularly until within six months of her death, at which time the regular discharge was supplanted by a constant sanguineous drain, with occasional attacks of profuse hæmorrhage, which brought her into a very low condition. She suffered severe pain in the back, and occasionally in the hypogastrium.

On examination after death the uterus was found somewhat increased in size, adherent superiorly to the sigmoid flexure of the colon, anteriorly to the posterior aspect of the bladder, posteriorly to the rectum, with which there was a communication formed, though it did not appear that this communication had been discovered during life; there were considerable traces of inflammation of the peritoneum adjacent to these parts. On slitting open the colon and rectum the mucous membrane was seen in a peculiar state of partial erosion, which gave it a somewhat reticulated appearance, and whilst the mucous membrane was thus engaged, the peritoneum did not seem to participate, inasmuch as this membrane could be elevated in many places, and the disease seen distinctly beneath it, the above-mentioned inflammation being apparently of a diffusive character, unconnected with the original disease. In the uterus the ulceration appeared to have commenced internally in the neighbourhood of the cervix, and to have gradually eaten its way posteriorly into the rectum; the usual appearance of the os tincæ was gone, the lips being destroyed, and the upper part of the vagina contiguous implicated; the upper portion of the uterus had escaped ulceration, but when cut into the fundus was found hard, and resembled in appearance an unripe pear. The disease had tended to a fatal termination by anæmia and by peritoneal inflammation, the former being the immediate cause of death. Mr. Boult remarked that this case resembled much more the character of lupus, than that of true cancerous disease.

CASE XXXVI.—*Ulceration of the larynx, and tubercular disease of the lungs.*

Mr. Barrett exhibited the larynx and part of the œsophsgus of a patient who had been under his care, chiefly complaining of difficulty of swallowing. The attempt gave rise to pain and vomiting. There was greater difficulty in swallowing fluids than solids. There was pain on pressure over the larynx. The individual sank gradually from exhaustion.

On dissection there was found ulceration of the epiglottis, both on its lingual and laryngeal surface; also of the antero-epiglottidean ligament, and on the posterior internal surface of the larynx. There were tubercular cavities in the lungs.

Mr. Barrett remarked on this case as having simulated disease of the œsophagus; but the passing of a bougie removed the doubt. The symptoms of phthisis were not clearly marked.

Foreign Department.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE.

The séances of this Academy during the past month have exhibited but a moderate amount of interest.

DISLOCATION OF THE PELVIS.

M. Begin read a report on a memoir by M. Murville on *luxations of the pelvic bones*, of which the author narrates two remarkable examples. The first was the

case of an officer who fell from a second-floor window, and lighted on the tubera ischii. The sacrum was displaced downwards by the weight of the body. On examination, the crests of the ilia were found to be almost touching the false ribs; the os coccygis, much shattered, projected considerably below. The patient complained of great pain in the sacro-iliac symphysis, with paralysis of the bladder and rectum, small pulse, and other signs of collapse. He was restored somewhat by stimulants, and when re-action was fully established, he was treated antiphlogistically, the displaced bones being maintained as motionless as possible. No attempt at reduction was considered advisable. This treatment was marvellously successful; not only did the patient survive, but the paralysis diminished, and in ten days the patient was able to walk with difficulty.

The second case is unique. An officer during a review was run away with, the horse at the same time plunging violently; in one of the plunges he was thrown considerably from his saddle, upon which he descended again with such force as to lacerate the left side of the pelvic arch, without injuring the skin. A second plunge of the animal added to the mischief, completely rupturing the ligaments of the symphysis pubis. When examined, a large inguinal hernia was discovered on the left side, and in the perineum a tumour projected as large as the fist, which could be pushed upwards into the pelvis. The symphysis pubis was separated to an extent which allowed the hand to be insinuated between the ossa pubis. The hernia was reduced, and the bones kept in apposition by bandages, and in three months the patient was able to walk. M. Murville upon this case founded some remarks upon the feasibility of the operation of division of the symphysis in labor. In a discussion which ensued, M. Malgaigne doubted that it was a case of simple dislocation, thinking it probable that there was also fracture.

STATISTICS OF LITHOTRITY AND LITHOTOMY.

After the presentation of memoirs on pellagra and vaccination, which are not of interest to the British reader, the discussion on lithotomy and lithotrity was resumed. M. Civiale, who opened the debate, gave a statistical account of stone operations in different localities. In Bristol, of 135 operations between the ages of one and ten years, 28 or one in 4.68 died. Of cases by Dr. Yelloly, on subjects under fourteen, 69 died out of 357 cases, or one in 5.17. Of 100 operations performed at the Hotel Dieu, 56 were cured and 28 died. Between the years 1836 and 1842, 73 operations for stone have been performed in the hospitals of Paris, on patients of all ages; of these, 45 were cured and 25 died; in 3 the issue was unknown. This makes a mortality of one in 3. In 89 operations by Dupuytren, on patients under the age of fourteen, the recoveries were 70, the deaths 19,—that is to say, 1 in 4.66. Such are the results of the operation for stone. In opposition to this, M. Civiale adduced the following statistics:—Of 838 cases of stone which presented themselves to him between the years 1824 and 1845, 548 were healed by lithotrity; the remainder were not considered proper cases. To these 548 cases he adds, 25 cases of lithotrity from relapses, 8 in which lithotrity was performed subsequently to lithotomy, and 10 recent cases, making in all 591. Of these 566 were cured, 14 died, and 11 were relieved. In recapitulation M. Civiale considers it established,—1. That by lithotrity properly performed, 98 patients out of 100 are cured. 2. That by lithotomy, performed without distinction of age, 20 or 30 per cent. are lost. 3. In infants 9-10ths are saved; among adults and old persons, 60 to 70 per cent. are saved.

NEW OPERATION FOR STONE.

M. Maisonneuve presented a patient from whom he had removed a stone by a new method, which he calls the *rectal* operation. The description is as follows:—The patient being placed in the lithotomy position, a sound with a wide groove is introduced into the bladder, and depressed towards the rectum by an assistant. The surgeon then introduces the index finger of the left hand into the rectum, and feeling for the staff, inserts the nail into the groove. This being done, a sharp-pointed bistoury, perfectly guarded, is slipped along the finger as a director, until its point inpinges upon the groove of the staff; it is then made to divide the walls of the rectum and the urethra. This incision made, the bistoury is withdrawn, and a double lithotome is inserted in a similar manner, until it reaches the groove of the staff; when withdrawing the left finger, the surgeon seizes the staff, and raises it a little, while with the right hand he pushes the lithotome into the bladder. The staff is then withdrawn, and the surgeon introduces the left index and middle fingers into the rectum below the lithotome, which is then withdrawn, so that its separated blades make a bilateral incision in the rectum, through which the stone is removed.

M. Jobert exhibited a boy whose lower jaw he had removed for disease of the bone, consisting of hypertrophy, with eburnation, and containing large cavities, filled with caseous matter. The operation does not offer any points of more than ordinary surgical interest.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES, PARIS.

The principal communications to be noticed are the following:—

TREATMENT OF FEVER.

M. Serres read a lecture on the "Remedial Treatment of Fever." He commenced by assuming that typhoid fever like other exanthematic fevers, consists of two distinct elements. 1. The exanthem as the basis. 2. The group of phenomena, the assemblage of which is known as fever. These, he considered, to bear a definite relation to each other, the severity of the latter being proportionate to the extent of the former. The origin of his predilection for the mercurial treatment of typhoid is to be traced to this supposed analogy. Finding that the varioloid eruption may be aborted by mercurials, as the *Emplast. Vigo cum Mercurio*, &c., it occurred to him that a similar mode of treatment might be beneficial in fever. His method is the following:—Internally he gives the black sulphuret of mercury, in four-grain doses, three or four times a day; externally he uses the mercurial ointment by

friction on the abdomen. This treatment he continues six or eight days, unless ptyalism occurs, when the dose is diminished. According to M. Serres, the headache and fever are speedily diminished by this treatment; adynamic symptoms are prevented. The quantity of the sulphuret required is seldom more than a drachm. Convalescence is established by the eighth to the fourteenth day.

PURULENT OPHTHALMIA IN INFANTS.

M. Chassaignac addressed a letter to the Academy in which he details some new facts relative to the purulent ophthalmia of new-born children. He has ascertained that if the purulent matter be carefully washed away, a false membrane may generally be detected. This membrane is greyish, and very adherent; it is mostly found on the palpebral reflection of the conjunctiva; its presence he believes to be the great obstacle to the cure of these cases, and he states that after its removal the case generally proceeds satisfactorily, either because it acted as a foreign body, or that it prevented the contact of the collyria with the diseased tissues.

The author likewise pointed out the striking benefit he had witnessed from repeated forcible syringing or douching of the eye with cold water. He states that since he has adopted the practice he has not lost a single eye, in fact that the cures are now as frequent as before they were rare. The resumé of his observations is thus given:—1. Purulent ophthalmia of new-born children is a diphtheritic inflammation, tending to the production of false membranes. 2. This membrane is so adherent that it can only be removed by peeling it off with forceps. 3. Irrigation of the eye and eyelids rapidly induces a cure.

M. Tavignot communicated his experience on the advantage of submitting patients to gentle salivation previous to operating upon them for cataract. By these means, iritis and keratitis, the two great drawbacks to the success of the operation, are stated to be frequently prevented.

M. Marchal de Calvi presented some analyses of the blood of scorbutic patients.

M. Sedillot read a paper on ætherization which is without interest.

THE MEETING OF UNION MEDICAL OFFICERS.

In consequence of the lateness of the period at which we received the more circumstantial account of the proceedings of the London meeting of the medical officers of Unions, we were unable to report Mr. Daniell's speech in full. As this eloquent address seems to embody the leading features of Poor-law grievances, we have been requested by some influential members of the Provincial Medical and Surgical Association to give it insertion in the present number of the Journal, partly that the views of Mr. Daniell may be more generally made known to the Association, and partly that other gentlemen engaged in union practice may be induced to furnish the Committee appointed at the meeting with such data and facts bearing on the subject as are in their possession. The speech as here reported is authentic.

Mr. Daniell after reading the resolution entrusted to him, addressed the meeting as follows:—

Mr. Chairman and Gentlemen,—One of the peculiar privileges of Englishmen, and one of the blessings which belong to a free and enlightened Government, is the facility which it affords its people of representing their wrongs and of granting them redress. To assume a character of indifference, to be careless to the legitimate claims of any section of the community when those claims are fully and fairly established, or to turn a deaf ear to undeniable truths, would argue a measure of moral turpitude and guilty negligence which I should be sorry to attach to any state! (Hear, hear.) Indeed I cannot believe in these enlightened times that any Government will wilfully do wrong. The difficulties which beset legislation are obvious enough, and there may be cases where, to accomplish general good, great partial evil may prevail. The income-tax is an example of this kind of evil. I attach no improper motives to the parties who introduced that measure, but I, in common with my professional brethren, writhe under its exactions. (Hear.) The object, however, of this convention of union medical officers, is to solicit the aid of Parliament, not to abrogate a law, but spare us an infliction for which no law exists. Our aim is to solicit Government to step between us and an arbitrary and grinding system, where the will of men, and not the laws of our country, is the paramount authority. We are met to claim from the Legislature their kindly assistance, so to organize the principles of medical relief to the sick-poor, that the latter may reap the benefit of good advice, and that the advisers themselves may be remunerated to an extent becoming their characters as gentlemen, and worthy their consideration as skilful and intelligent men. (Cheers.) I am no enemy to a proper system of economy. I laud every institution that has an eye to the careful expenditure of its funds: but there is a wide difference between a griping parsimony and a proper economy—the former invariably inflicts evil upon itself, while it fails not to render wretched the victims of its baseness. (Cheers.) We all know that, under the new Poor-law Bill, a board of guardians has been appointed in every union to transact the business appertaining to that union. We also know that that board is composed of a heterogeneous compound of character, of men as versatile in their powers and capacities as it is possible for versatility to go, and that perfect union of opinion amongst them would be a circumstance scarcely to be anticipated, both anomalous and extraordinary! You will remember, too, that it is not the weight of intelligence which carries the day in these assemblies. No, it is the majority of votes. I wish not to reflect upon these gentlemen—doubtless they are worthy and excellent personages according to their vocation, but I will say that intellect is not so rife amongst them as to shine on all occasions with extraordinary brilliancy. If, then, there be a lack of this peculiar commodity—if the majority of that board be composed of men of very ordinary capacities, of limited

intelligence, of narrow views, and narrow conceptions of the dignity of mind—how shall they grapple in their dealing with men who offer mind as the article of barter? Do men in general put a high value upon that which they do not understand? Are they not disposed rather to underrate—nay, to consider as nothing that which is not tangible like a bale of goods, a sample of corn, or a fat beast? (Cheers.) When, therefore, the medical officer is to be engaged, these gentlemen have an immediate eye to a rigid system of parsimony, and without a due reference to the quality of the material—for of the quality they know nothing—their object is to get what they need at the cheapest rate. (Hear, hear.) Are medical men in the conventional usages of society different from others? Will they willingly abandon their own interests, and, with a Quixotic spirit, encounter dangers and difficulties for the mere love of it? (Hear, hear.) Will they visit the houses of the poor, dispense the peculiar blessings of their order, hang over the sick bed of contagion, and breathe the poison of pestilence—will they watch the suffering victim, and smooth his dying pillow—will they be ready at a moment's warning to leave their cheerful hearths, or in the bitterness of an inclement season quit their beds, to ride over plain and upland, by fearful precipices or gloomy ravines, entering the squalid habitations of destitution and misery amidst foulness and filth—to allay the anguish of disease, or to check the progress of some awful and destroying malady? To the honour of my profession be it said, they will!! But is it consistent with the principles of humanity—is it in accordance with the duty which man owes to man, that such services should be unrewarded, or that they should be paid for at a rate which makes it little better than charity on our parts, and which puts profit out of the question? I must reiterate what I have said elsewhere. That there are venal men in our profession—who will doubt?—for there are venal men in every profession. Such men contract with a board of guardians for attendance on the poor, but they contract with a mental reservation that they will not be losers. Who then is the victim? Why, the poor sufferer who is deprived of what might benefit him, because valuable remedies are withheld. In a secondary sense, the board of guardians too, for the protracted illness of the poor patient, protracts also his weekly payments, and swells out the relieving officers' accounts far beyond what would have been an equivalent for the better duties of a medical officer. Oh! that men would see the cogency of truths like these, for they are damning evidences of a bad system. (Cheers.) But it might be argued—give us evidence that you are ill paid, prove that boards of guardians are parsimonious, or that the Commissioners are wanting in attention to your claims. I make no doubt that many gentlemen here present are prepared with facts to illustrate my assertion, viz., that in the majority of the unions of this kingdom the salaries of the medical officers will not pay for the value of medicine, if dispensed and charged by an ordinary druggist. But I will illustrate my position by taking the Newport union as an example. I have here a list of parishes, the amount of population, and the yearly salaries paid to medical officers:—

NEWPORT PAGNELL UNION, 1847.

Medical Salaries.	Parishes.	Population.
£2 0 0	Astwood	242
4 0 0	Bletchley	410
2 10 0	Bradwell	374
0 10 0	Brafield	83
6 10 0	Bow Brickhill	566
9 0 0	Great Brickhill	721
4 10 0	Little Brickhill	563
2 0 0	Broughton	168
3 0 0	Castle Thorpe	365
4 0 0	Chicheley	245
2 0 0	Clifton Reynes	213
9 0 0	North Crawley	865
5 10 0	Emberton	658
1 10 0	Gayhurst	116
16 0 0	Hanslope	1553
1 10 0	Hardmead	83
3 0 0	Haversham	283
1 10 0	Lathbury	127
5 0 0	Lavendon	669
4 0 0	Great Lindford	449
1 0 0	Little Lindford	64
3 10 0	Loughton	361
4 10 0	Milton Keynes	329
3 0 0	Moulsoe	296
18 0 0	Newport Pagnell	3568
1 10 0	Newton Blossomville	264
6 0 0	Newton Longville	559
17 0 0	Olney	2349
4 10 0	Ravenstone	416
4 0 0	Shenley Church End	220
6 10 0	Sherrington	856
3 10 0	Simpson	551
0 10 0	Stantonbury	42
8 10 0	Stoke Goldington	855
7 10 0	Fenny Stratford	763
2 10 0	Tyrington and Filgrave	206
2 0 0	Walton	103
2 0 0	Warrington	97
3 0 0	Water Eaton	275
20 0 0	Wavendon	846
3 10 0	Weston Underwood	438
0 10 0	Willen	97
1 10 0	Great Woolstone	94
1 0 0	Little Woolstone	115
3 10 0	Woughton	333
£216 0 0	Total	22,850

You must bear in mind, gentlemen, that many of these parishes are heavily burdened with poor; that in many instances they are five and six miles from the residence of the medical officer; that there are many toll-gates; and that in consequence of the high price of provision last year distress and destitution prevailed in no ordinary degree, and as a consequence disease prevailed also. You may be disposed to ask how gentlemen, valuing their attainments, putting the slightest estimate of worth upon their powers, and anxious to support the dignity of their calling, could possibly accept of appointments which, in the first place could not be remunerative, and in the second was degrading to their dignity and character. The truth

is, that from year to year we have been led to expect a change;—we have been induced to think that so crying an evil must meet with its remedy from the hands of those whose especial business it was to correct abuses. In the very early stages of our career, almost at the beginning of the new law in our neighbourhood, we, the medical officers of the union, presented a remonstrance to the board, setting forth our claim for more ample remuneration. But this remonstrance failed in producing any very beneficial effect. We next memorialized the Poor-law Commissioners, and they were courteous and attentive, for they furnished us with a very *polite* and very laconic reply, stating they had sent our memorial to the board! Then doubtless it experienced the fate which certain bills do in another house, ordered to be read that day twelve-months! (Laughter and cheers.) Yes, there can be no doubt that that poor memorial served to comfort and warm the gentlemen so graphically described by Dickens, as wearing white waistcoats, or some veritable Bumble, while it blazed and crackled on the board-room fire. (Cheers.) Still we did not despair.

"Not by failures vex'd,
And even certain to succeed the next."

We resolved upon a new expedient. We determined to meet—we determined to exhibit our magnanimity, and, despite of the sacrifice of no small proportion of our quarter's salary, we positively ordered a dinner at the principal inn in the town—

"A dinner of the best;
Lo! to a turn the different joints were drest."

I do not think any of us grew pot-valiant on that occasion, but we came to a conclusion that we would go in a body to the board of guardians, and try the effect of a *viva voce* representation. By a strange obliquity of judgment I was made the mouthpiece of the party, and to the best of my abilities I endeavoured to show the wrong which each of us had sustained. As far as I was individually concerned, I proved beyond the possibility of contradiction, that I had during the last twelve months dispensed medicines to the poor, and charging for it at a rate which a druggist would charge—allowing nothing for journeys, for time, for skill—I was absolutely minus £24. (Hear, hear.) Did this representation produce any effect? Truly it did, for the commissioner who was present overwhelmed us with high eulogistic compliments upon our gentlemanly behaviour, for our temporate exposition of facts, which he declared, in all his experience of similar complaints, had no parallel! He intimated, moreover, that he should invite some of us to dinner when he next came to Newport Pagnell, that we might quietly talk over the business, with a view to a satisfactory arrangement. Alas, for our organs of gustativeness! The salmon has never leaped into the net, or the mutton fattened in the pastures, which has to grace our table on that auspicious day. (Laughter and cheers.) The dinner and the consultation found a grave in forgetfulness, and we are still as we were. So true it is that the best motives and principles are frustrated in their effects by the baleful influence of procrastination. As a keen satirist of the last century says, when royalty passed through a certain city—

"He gied the *hospital* a ken,
'Twas all he gied; 'but then,' quoth he,
'I'll something gie, my lord, d'ye zee,
When I come here agen.'"

(Cheers.) But enough of complaints. How are these evils to be remedied? One thing is obvious; we must remedy them ourselves. We have now assumed our proper position. We come not like factious men to violate laws, or break the bonds by which society is united. We have combined for a legitimate purpose; and it is our intention to carry our grievances where they ought to be redressed—to the fountain of law itself. And what is it we ask? Simply that which is conceded to the lowest subject in the realm—a fair remuneration for our labours, an adequate compensation for arduous and painful duties imposed upon us. And surely we have a high justification, for is not "the labourer worthy of his hire?" (Hear, hear.) Let us, then represent to the Government, that medical remuneration for attendance on the sick poor legitimately belongs to them; that they are in a position to take upon themselves the responsibility, because they take upon themselves to pay half the expenses. (Hear, hear.) Let us urge upon them the necessity of a fixed and settled principle, either to tax the parishes according to the amount of population, or to employ some distinguished actuary to form a correct scale of charges according to the returns of sickness and mortality, bearing in mind extra-charges for mileage according to the distance which the medical officer has to travel. This, in my opinion, is a most essential consideration, and it will produce one good effect, for it will necessarily limit the districts within suitable and proper dimensions, and put an end to that preposterous practice of engaging medical officers whose residences are so remote that their services are scarcely available. (Cheers.) One or two more observations and I have done. Contrast for a moment the conduct practised towards us as medical men, with that adopted towards the clergy. No man entertains a higher reverence for the church than I do. No man estimates the value of the clergy more than I do. God forbid that I should utter a syllable that would tend to militate against their holy and exemplary office; but I must be pardoned if I question whether the duties of a clergyman are superior or even equal to ours. Nay, I contend that the labours of the one and the other cannot be put in juxta-position. Yet would you believe it, I read in a public journal the other day, in the items of the expenses of a county gaol, that the surgeon's salary was £80 a year, while that of the clergyman was £200. Surely, thought I, there can be no comparison betwen the services of the one and the other. (Hear, hear.) The clergyman preaches his sermon on a Sunday, may have prayers in the week-day, and occasionally visit the sick; but the medical man furnishes medicine, gives daily attendance, and in severe cases is ever at the call of the authorities, and is liable to be disturbed in the midle of the night to encounter pestilence in all its forms and characters, and perform professional duties difficult and dangerous to himself.

Are we not as well educated as the clergy, and is not our position in life really as valuable as theirs? (Hear, hear.) I grant that the soul of man is superior to his body, but a great deal may be said about his body too. (Hear, hear.) I do not object to the clergyman getting £200; it doubtless is his due. But why should not the medical officer get £200 also? And here let one fact be mentioned without stating where it occurred:—A poor woman had typhus fever. The medical man considered that she was not in a condition to receive the clergyman's visits, and could not advise him to go. But she got better, and then she had a desire to see him. His answer was, "No, no; it is fever. I shall not go; I might take it home." (Hear, hear.) No one present would grudge a clergyman his fair salary, (hear, hear,) but it ought to be remembered, in comparing the two cases, that a medical man has not any such privilege as this. No. The board of guardians would say to the medical officer, if he hesitated on the score of contagion, "Sir, we pay you for these duties, and we expect you to perform them." And, is not the clergyman paid also? But no Board interposes its dictum to command obedience in his case. (Hear, hear.)

MEDICAL ETHICS.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.

A large and influential meeting of the members of the profession, convened by public advertisement, was held at the Law Society's Rooms, Manchester, on Thursday evening, the 28th ult., to receive the report of the Provisional Committee, appointed August 4th, to frame laws and regulations for the government of a Medico-Ethical Association. The chair was taken by Dr. J. L. Bardsley, and after the report had been read, the following resolutions were unanimously passed.

Moved by J. Windsor, Esq., seconded by R. T. Hunt, Esq.

"That the principal objects of the Association be, to frame a code of etiquette for the guidance of its members; to decide upon all questions of usage or courtesy in conducting medical practice; to support the respectability and maintain the interests of the profession; to promote fair and honourable practice; to correspond with bodies or individuals in other parts of the kingdom on any matter touching professional interests, and by its moral influence and the exercise of a judicious supervision, to prevent abuses in the profession."

Moved by W. Wilson, Esq., seconded by D. Noble, Esq.

"That all medical practitioners resident in Manchester, or within twenty miles of that city, who possess a degree, diploma, or license from any legally constituted corporate institution in the United Kingdom, or from any foreign university, requiring residence or examination to obtain its diploma, and who shall be admitted in pursuance of such rules as may be hereafter adopted, shall be members of the Manchester Medico-Ethical Association."

Moved by S. Crompton, Esq., seconded by R. Flint, Esq., of Stockport.

"That every member on admission pay to the Treasurer, either the sum of five guineas at one payment, which shall constitute him a life member, or an annual payment of half a guinea."

Moved by W. C. Williamson, Esq., seconded by Dr. Aikenhead.

"That two books, to which are appended copies of these resolutions, and of the proposed bye-laws, shall be deposited, the one at Messrs. Simms and Dinham's, the other at the Reading Rooms of the Medical Society, and that any members of the profession who enrol their names and professional titles in the same, prior to November the 18th, shall become *ipso facto* members of this Association; provided, nevertheless, that any three gentlemen so enrolled, may, at the first meeting of the Association, demand a ballot on the admission of any one whose name appears in the list."

Moved by J. G. Harrison, Esq., seconded by Dr. Browne.

"That the first meeting of the Association be held in the Law Society's Room, on Thursday, the 18th of November, at six o'clock in the evening, when the members will determine on the general laws, and elect the officers of the Association; and that the Honorary Secretary be instructed to give to each member three days' notice of such meeting."

Moved by G. Southam, Esq., seconded by J. Bent, Esq.

"That a report of this meeting be forwarded by the Honorary Secretary, to the Medical Periodicals, with a request for its insertion."

After votes of thanks had been severally passed to the Provisional Committee, Honorary Secretary, and Chairman, the proceedings of the evening, which had been conducted with the greatest unanimity and good feeling, were terminated by upwards of thirty gentlemen enrolling their names as members of the Association.

PROPOSED BYE-LAWS OF THE MANCHESTER MEDICO-ETHICAL ASSOCIATION.

SECT. I.—*Disqualifications for Membership.*

Any practitioner who may act in opposition to the principles involved in the eight succeeding laws, shall not be eligible to the membership of this Association; and if already a member, he shall, on infringing the same, be liable to expulsion.

1.—No member shall practise, professedly and exclusively, homœopathy, hydropathy, or mesmerism.

2.—No member shall by advertisement, circular, or placard solicit private practice.

3.—No member shall be the proprietor of, or in any way derive advantage from, the sale of any patent or proprietary medicine.

4.—No member shall give testimonials in favour of any patent or proprietary medicine, or in any way recommend their public use.

5.—No member, who may keep an open shop, shall sell patent medicines, perfumery, or other articles than pharmaceutical drugs and preparations.

6.—No member shall enter into compact with a druggist to prescribe gratuitously, and at the same time share in the profits arising from the sale of the medicines.

7.—No member, being a graduate in medicine engaged in general practice, shall hold the office of physician to any public institution.

8.—No member acting as medical officer to a public

institution, or poor-law union, or as district vaccinator, shall abuse the privileges of his appointment to the injury of his fellow practitioner.

SECT. II.—*Code of Etiquette.*

1.—No member shall, on any pretext, meet in consultation persons practising medicine, who do not possess one or more of the qualifications enumerated in No. 2, of the general laws.

2.—No member shall meet in consultation any medical practitioner who may be inadmissible, by the operation of the bye-laws, (Section first,) as a member of this Association.

3.—No member shall meet in consultation any practitioner who has been expelled this Association.

4.—When a senior practitioner is called upon to meet his junior in consultation, for a second opinion, it shall be competent for the former to represent the propriety and advantage of obtaining the assistance of a more experienced practitioner, but if the patient specially desire to have the opinion of any qualified member of the profession, even though a junior, it is the duty of the practitioner in attendance to acquiesce.

5.—When two practitioners attend in consultation, and the period of meeting having been fixed, one of the two neglects punctuality, thus wasting the time of the other, the latter shall be expected to wait ten minutes, and then visit the patient.

6.—In consultation, the graduate in medicine practising as physician, is entitled to the precedence of the general practitioner.

7.—In consultation, the practitioner last called in is entitled to precedence, (except in the case provided for by rule six;) at the same time it is submitted that, should the latter be a junior, the greatest delicacy and consideration should regulate his conduct.

8.—When a practitioner attends for another, or in consultation with another, and it appears necessary to change the treatment, it should be done with the most scrupulous care, to avoid reflecting on the previous treatment; which in no instance should be openly condemned.

9.—When a practitioner is consulted by a patient already under the care of another, he shall on no account interfere with the case, but shall request a consultation with the gentleman previously in attendance. If, however, the latter refuse this, or if the patient insist on dismissing him, and a communication to that effect be made, the practitioner last consulted will be justified in taking charge of the case.

10.—When during sickness, affliction, or absence from home, one practitioner has entrusted the care of his practice to a professional friend, the latter shall not make any charge to the former, or to the patients for his services, but shall in all things be *locum tenens* of the absentee.

11.—In all other cases where a practitioner is requested by another, or any member of his establishment, to act for him, the former shall be entitled to compensation at the hands of the latter, unless some previous arrangement has been made by the parties; the fee to be regulated by the circumstances of the case, but in no instance to be less than half-a-crown.

12.—When a practitioner is called upon by the assistant or servant of another to attend to an accident or other emergency in a family to whom both are equally strangers, the former shall be entitled to take charge of the case throughout; but if the family should communicate their previously-formed intention of employing the latter, he shall be remunerated according to rule eleven, and resign the case.

13.—When a practitioner is called in on emergency by a family usually attended by another, he shall, when the emergency is provided for, send for the ordinary medical attendant, and after one consultation, resign the case into his hands, but be entitled to charge the family for his services.

14.—When a practitioner is called in to attend at an accouchement for another, and completes the delivery, he shall, with the exception provided for in rule ten, be entitled to receive the fee; but when the delivery is not completed on the arrival of the pre-engaged accoucheur, the case shall be immediately resigned to him, and the fee equally divided.

15.—When a practitioner is consulted by a patient whom he has previously attended as the officiating friend of another, during sickness, or absence from home, he shall enquire whether the patient has determined on changing his medical attendant; if so, he will be justified in taking charge of the case; if not, and the question be simply one of preference between the two practitioners, he should decline attendance.

16.—When a patient is not satisfied with the treatment of the officiating friend left in charge, and wishes to have another opinion, the second practitioner called in shall stand in the relation of physician or consulting surgeon.

17.—When a practitioner is ill or absent from home, and the patient wishes to have a medical man of whom he knows something, rather than the officiating friend of whom he knows nothing, the practitioner so selected shall be entitled to act according to rule thirteen.

18.—When a practitioner has officiated for another, and the ordinary practitioner has resumed his attendance upon a case, the former shall on no pretext make friendly calls upon the patient, unless justified by previous personal intimacy.

19.—While this Association does not propose to interfere with the medical relief part of friendly societies of artizans and operatives, it enacts, at the same time, that no member, being a candidate for the office of surgeon to a club or friendly society, shall, by canvassing, treating, or other undue familiarity, solicit the votes of its members.

20.—"When a diversity of opinion, or opposition of interest, occasions controversy and contention between medical practitioners, the matter in dispute shall be referred to another physician or surgeon, as the case may be; but neither the subject matter of such reference, nor the adjudication, should be communicated to the patient or friends, as they may be personally injurious to the individuals concerned, and can hardly fail to hurt the general credit of the faculty."—*Percival's Medical Ethics.*

21.—"Officious interference. It frequently happens that a medical man may have the case of another practitioner stated to him in so direct a manner, as to render it difficult to decline any attention to it. Under such circumstances, his observations should be delivered with

the most delicate propriety and reserve. He should not interfere in the curative plans pursued, and should even recommend a steady adherence to them, except in cases where either artful ignorance imposes on credulity, or neglect, or rashness, threatens the patient with imminent danger."—*Ibid.*

22.—"When a practitioner is called as a witness in any trial, he should be careful to avoid acting as a partizan, and for this purpose should, if possible, previously consult with any other medical practitioner who may be engaged on the same or opposing side as to the medical facts of the case; but this shall not prevent in any way the courteous statement of his own private opinion concerning them."—*Beck and Smith.*

SECT. III.—*On the Adjudication of Disputes.*

1.—All charges of non-observance of the bye-laws, or breach of the code of etiquette, brought by one member against another, shall be decided by the Council.

2.—In case of a dispute arising between a member of the Association, and a qualified medical practitioner who is not a member, on any point of etiquette, the latter shall be invited to name a medical friend, who, in conjunction with two others, one nominated by the member, and the other by the council, shall constitute a "court medical" to judge and decide on the case, and their decision shall be final.

3.—In case a dispute arising between qualified practitioners who are not members, but who may both request the interference of the Association, the council shall have power to adjudicate in such manner as, under the circumstances, may seem most desirable.

Note.—The term *practitioner* in these bye-laws includes all grades of medical men when not otherwise specified.

General Retrospect.

ANATOMY AND PHYSIOLOGY.

ON THE NERVES OF THE SHEATHS OF THE ROOTS OF SPINAL NERVES.

M. Pappenheim addressed a note to the Academy of Sciences, which was read at their sitting on the 13th of August, respecting the sheaths of the roots of spinal nerves, and the necessity of taking into consideration the existence of their small nerves in drawing conclusions from any experiments on recurrent sensibility. The author stated that he had rendered himself certain of the existence, both in the horse and dog, of small nerves on the sheaths of the anterior roots of the spinal nerves, a matter which had been doubted by some anatomists. From numberless observations on all parts of the human body, he had become persuaded that nerves would be found wherever arteries were met with. "Now, on the anterior roots of a spinal nerve, an artery is found; at its side are nerves, but their number, structure, origin, and situation, are not always the same. I find, too, as does M. Magendie, that the inferior nerves, on the anterior roots of which sensibility has so clearly been observed, have the greatest number of nerve-fibres in their sheaths, whilst the superior roots, of short extent, are so poorly provided with nerves, that sometimes I have failed to find any, but which at present appears a matter of little moment. The nerves of the sheaths do not wholly belong to the system of vegetable life, (the organic nervous system,) but also, in part, to the cerebro-spinal system. The fact is completely beyond dispute, for I have two or three times succeeded in following nerves clearly arising from the root, and curving upwards, to arrive at the sheath of the motor nerves. Sometimes the nerves, having gained the sheath, proceed upwards; sometimes they descend; sometimes they may be followed to the inside of the dura mater; at other times they remain outside of it. In most cases I have succeeded in finding but one ramification of the nerves; once I have seen a nerve-filament, consisting of nearly eight or ten primitive fibres, mount and divide into two portions, one of which continued its course, whilst the other descended towards the periphery, forming an arch, such as is observed to be the termination of nerves, in numerous cases."

ON THE PULSE OF THE AGED.

By Dr. Pennock.

Physiologists, generally, have considered it as an established fact that the frequency of the heart's action diminishes in advanced age; and no one had called the correctness of this view in question until Leuret and Mitivié, in 1832, whilst engaged at the hospital of Salpêtrière, Paris, in observations relative to the pulse of the insane, were astonished to find that the pulse of 34 sane women in good heath, whose medium age was 71 years, presented the average of 79 beats in a minute. This fact induced them to make further observations, and to institute an inquiry as to the relative frequency of the pulse of the young adult and that of the aged. On the same day, at the same hour, and under analogous circumstances, the pulses of the young men at the veterinary school at Alfort, and those of the old men in good health at the Infirmary at Bicêtre were examined. The number of the veterinary students was 110, that of the aged men 27; the average age of the students was 21 years, that of the aged men was 71 years. The result of this examination proved that the medium pulse of the young men was 65 per minute, that of the aged was 73. Temperature 32° Fahr.

Dr. Pennock has also instituted a series of observations in the Philadelphia Hospital, Blockly, on the pulse and respiration of the aged inmates in the adjoining Infirmary. The number of persons whose pulse is reported is 170 men, and 203 women, being an aggregate of 373, the ages of the men being between 50 and 90 years, those of the women from 50 to 115 years. The results obtained are exhibited in tables. Table A. is derived from the observation of the pulses of 170 men, the aggregate of whose ages is 10.895, and that of the pulsations 12,211. The respirations were counted in 146 instances, the total number of inspirations being 3045. The medium age was found to be 64.09 years; the medium pulse 71.83 per minute; the medium respiration 20.51; the ratio of respiration to pulsation as 1 to 3.51. Table B. is derived from the observation of the pulse of 203 females, the aggregate of whose

ages is 14, 326, and that of their pulses 15,838. The respiration was counted in 143 individuals, and its aggregate is 3154. The medium age was 70.57 years; the medium pulse 78.02 per minute; the medium respiration 22.06; ratio of respiration to pulse as 1 to 3.53 From the preceding facts, it would seem to follow that the medium pulse of the aged man may be stated to be 71.83, that of the aged female 78.02 per minute, whilst the respiration of the former is 20.51, that of the latter 22.06 per minute. The ratio of the respiration to the pulse in aged men is as 1 to 3.51; that of the women as 1 to 3.53. From table C. it appears that in above one-half of the aged men, (52 per cent.,) the pulse ranges from 76 to 84; that in more than one-third, (43 per cent.,) it is over 63; whilst in about 2 per cent. it averages, say 55; and in rather more than 3 per cent. it is over 96. It is evident also, (Table D.,) that the pulse of aged females varies from 70 to 104 in nearly four-fifths of the individuals, or 79.93 per cent. of those examined; that in more than two-thirds, (69.45 per cent.,) the range of the pulse was between 75 and 86; that in 7.39 per cent. the pulse was between 95 and 96; that in 2.41 per cent. it was at 104; whilst it was below 70 in but a small number, viz., 37 out of 203, being rather less than one-fifth of the whole, or 18.34 per cent.; the pulse was below 60 only in five instances, or in 2.41 per cent. of the whole number. From the preceding facts and researches, it is evident that the frequency of the pulse of the aged is much greater than that usually assigned to it; whilst that of the respiration is equal to that generally admitted in reference to the adult in middle age.—*American Journal of Medical Sciences*, July, 1847.

INTERMITTENT PULSE, COINCIDENT WITH HEALTH.

M. Bidard, d'Arras, gives an account of a man, above the middle stature, of the sanguine temperament, and of a strong constitution, and who had never suffered from any illness, except from inflammatory fever when about twelve years old, but the pulsation of whose heart and arteries were very abnormal. In 1826, M. Bidard was called to him on account of a contused wound of the left leg, from a kick of a horse, but which affected him very little. On that occasion, M. Bidard felt his pulse, when he noticed that after every two pulsations there was an interval of repose for nearly the length of one pulsation. There were forty-two pulsations and twenty-one periods of repose in a minute. The same condition was observed also in other arteries besides the radial. Upon listening to the heart's sounds, there were two normal and successive contractions, and then an interval of rest, perfectly isochronous with that remarked in the pulse. On further auscultation and percussion, nothing otherwise abnormal could be detected about the heart and vessels, nothing at all to explain the intermittence. The man stated that this peculiar condition of his pulse was also remarked by the medical man who attended him in his only illness when a boy. From that time up to the period of his decease, lately,—*i.e.*, for twenty years,—M. Bidard has frequently marked the constancy of this anomalous circulation, as also have many other physicians. Death followed at the age of eighty-four, apparently as a consequence of old age, without any well characterized malady, but with a gradual failing of sight, hearing, and of the vital powers generally, and with the supervention of extreme anorexia.

After death, the lungs were found healthy, with a few pleural adhesions; the pericardium contained but little serum; the ascending and descending aorta, and the venæ cavæ, preserved their integrity; the heart was of a proportionate volume with the other viscera, and without any apparent anatomical lesion; the vessels were normal in their distribution; so also were the nerves.—*Gazette Médicale*, Sept. 4me.

[Cases not unlike the above have, we presume, been noticed by most experienced practitioners; two or three such have occurred to ourselves; in one which is particularly impressed upon our mind, that of an aged medical practitioner, intermittence of the pulse was the normal state, but the heart's action became perfectly rythmical upon the supervention of any slight febrile disturbance.]

PRACTICAL MEDICINE.

TREATMENT OF FACIAL PARALYSIS.

Mr. Corfe, in speaking the treatment of these cases, observes:—But this only I am anxious to notice, that of all the recent discoveries in the practice of medicine, the application of the Lin. Olei Tiglii is a most efficacious remedy, applied with a camel's-hair brush along the course of the seventh nerve, as it emerges from the skull. The pustular eruption and irritation which it produces are rapid, evanescent, and readily controlled. The effect has been surprising in some instances, but, at the same time, active purgation has been kept up by calomel and drastic purgatives. This treatment was first suggested to my mind by witnessing the astonishing influence of this counter-irritation, so admirably followed out in other diseases by our talented assistant physician, Dr. R. G. Latham.—*Medical Times*, Oct. 22nd.

PURULENT OPHTHALMIA TREATED BY COLD WATER DOUCHES.

A medical pupil, while engaged in syringing the eyes of an infant affected with purulent ophthalmia, was so unfortunate as to have some of the matter applied to his own eye by the child spitting out the discharge, which the syringing had caused to run down its cheeks into its mouth. Next day he observed a small quantity of mucus in the internal canthus, and also a slight vascularity, which extended to the cornea. The opposite eye was unaffected. On the following day he found that he could not open the affected eye, and on forcing open the lids, observed that it was bathed in pus. The conjunctiva was now vividly injected throughout its entire extent, but there was as yet no chemosis. As he did not feel much, he still continued his attendance at the hospital. It was then that M. Chassaignac submitted the eye for the first time to a powerful jet of cold water, (about a pint,) and afterwards inserted a few drops of a weak solution of nitrate of silver.

On returning home the patient took a warm bath for

the space of two hours, and at the same time placing his head under the cold water tap, allowed a repeated and prolonged jet to fall upon the eye. In addition to this, during the intervals of the jets, which were continued day and night every hour, the eye was covered either by compresses of cold water, or by bladders of ice. By the middle of the next day, after the action of purgatives, some improvement took place; the injection of the conjunctiva was less vivid, and in another four and twenty hours was considerably abated. We need not follow the case further in detail, suffice it to say that the douches were repeated now at intervals of two hours, and on the eighth day the patient was cured.—*Gazette Mèd.*, Sept. 4me.

[This mode of treatment which is extensively employed by M. Chassaignac is said to be most effectual, and especially in preventing the extension of the inflammation to the cornea. Of 66 cases of purulent ophthalmia thus treated, the narrator states that not one instance occurred in which the cornea was affected, and therefore, not a single eye was lost. These results, if to be depended on, assuredly warrant the adoption of the practice; for by no other can we count upon similar success.]

SURGERY.

VESICAL CALCULUS IN INFANCY.

Since the year 1840, M. Guersant has operated at the Children's Hospital upon forty-two subjects: all, with the exception of four, were boys. Before deciding upon the method to be employed for the removal of calculus, M. Guersant recommends the exploration of the bladder with lithontriptic instruments, for the purpose of ascertaining in a precise manner the size of the concretion. In little girls the introduction of crushing instruments is always easy, but the bladder can only with difficulty be kept in a state of distension. In nine cases M. Guersant has adopted lithotrity—six were cured and three died; but two of these only from the results of the operation. M. Guersant, in opposition to M. Ségalas, considers that the presence in the bladder of a large number of concretions is a counter-indication to lithotrity. In the case of a boy, aged eleven, who had been eleven times submitted to this operation by M. Ségalas, M. Guersant performed cystotomy, and was obliged to introduce the forceps thirty-two times before he could succeed in removing the whole amount of calculi which had accumulated in the bladder: their total weight was ninety-one grammes three ounces. In thirty-five cases M. Guersant employed this method, and twenty-nine children were cured; and of the other six cases which terminated fatally, the death could only in two instances be referred to operation, and was in the remaining four brought on by croup, scarlatina, pneumonia, &c.,—complications independent of the operation itself, and which are more frequent in hospital, than in private practice.

MIDWIFERY.

PUERPERAL NEURITIS IN THE LOWER EXTREMITIES.

Dr. Simpson has directed the attention of the Obstetric Society of Edinburgh to this as another not unfrequent, but neglected form of puerperal disease. He had seen several cases of it, and had found it mistaken for phlebitis, and other forms of phlegmasia dolens. It was characterized often by numbness and tingling of the affected limb, and pain, fixed or remittent, passing along the crural or sciatic nerve, down to the knee, calf, or even the foot—increased by pressure along the course of the nerve, and by stretching of the limb, sometimes relieved by strong pressure on the highest portion of the nerve. Sometimes there was no co-existent œdema, or, if it were present, the pain was in a degree greatly disproportionate to the œdema. It was often very protracted in its course. After local leeching, an elevated position of the limb, the application of belladonna, aconite, &c., greatly relieved the patients.—*London and Edinburgh Monthly Journal.*

INTERNAL HÆMORRHAGE DURING PREGNANCY.

M. Plainchant has communicated to the Academie de Médecine of Maulins, a case he met with in his practice of very unfrequent occurrence. A strong, healthy, although lymphatic woman, aged 47, the mother of several children, had arrived at the sixth month of her last pregnancy in her usual good health, when one evening she was attacked with pains in her loins and colic; a midwife was called in, who, on examination, found nothing to indicate an approaching miscarriage; the pains, however, became more frequent, she got fainting fits, the skin became cold, the pulse thready, and the patient sank calmly in five hours after the first attack. Nothing had escaped from the vagina. On examination after death, the uterus was found very large and firm; an incision was made into it, and the waters escaped without anything unusual being perceived; the child was well formed for a six months' fœtus; the umbilical cord was uninjured; the placenta was connected with the fundus uteri by a small part of its substance, but was separated to a large extent from it by a quantity of blood, to the amount of about 500 grammes (about 17 oz.) The uterus was very red at this part, but showed no lesion of its texture; two fibrous bodies, each the size of a large nut, were found implanted in the wall of the uterus of the right side.—*Journ. de Méd. et Chir.*

Medical Intelligence.

PROGRESS OF THE CHOLERA.

Three cases of Asiatic cholera are stated to have occurred in Paris. The cases as reported are, however, by no means unequivocal instances of the disease.

APPOINTMENTS.

Dr. H. Guéneau de Mussy, and Dr. Rodier, recently sent by the French Government to investigate the epidemic typhus of Ireland, have been appointed Chevaliers of the Legion of Honour.

J. F. France, Esq., has been appointed Surgeon to the Eye Infirmary of Guy's Hospital, in the room of Mr. Morgan, deceased.

On Thursday, the 28th of October, Dr. Wm. Budd was unanimously elected Physician to the Brisiol Infirmary, in the room of Dr. Riley, who has resigned.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members November 5, 1847:—T. H. Wardlesworth; G. C. Hyde; H. J. Hinxman; A. J. Payne; R. Jones; C. A. Dalgairns; S. Jones; G. C. Phillips.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates Thursday Oct. 28:—John Beach, Bradford, Yorkshire; Charles Wise Hollis, Yarmouth, Isle of Wight; Mallalieu Taylor, Ashton-under-Lyne.

OBITUARY.

Died, October 19th, in the county of Tipperary, of fever, Valentine Hood, Esq., M.D., formerly of Dublin.

October 22nd, at Belfast, of fever, — M'Murray, Esq., Assistant Surgeon to the General Hospital.

October 28th, at Warrington, aged 25, of fever, John Hinde Gandy, Esq., House Surgeon to the Warrington Dispensary.

November 5th, in Gordon Square, aged 68, Robert Richardson, Esq., M.D.

November 6th, in Portman Street, aged 60, Powell Charles Blackett, Esq., Surgeon, R.N.

November 8th, of fever, Nathan Kennicott, Esq., of Houghton le Spring, Surgeon to the Poor-Law Union of that place.

BOOK RECEIVED.

On the System of the Great Sympathetic Nerve. By Charles Radclyffe Hall, M.D. Second Part. 1847, 8vo. plates.

METEOROLOGICAL JOURNALS FOR AUGUST, 1847.

Kept at Sidmouth, by W. H. Cullen, M.D.; at Honiton, by Mr. Rogers; at Romsey, Hants, by F. Buckell, Esq.; at Uckfield Sussex, by C. L. Prince, Esq.

		Sidmouth.	Honiton.	Romsey.	Uckfield.
External Thermometer.	Mean at 9 a.m.	62.41	60.87	60.91	.
	,, at 9 p.m.	59.07	8p.m. 59.03	58.58	.
	,, of the Maxima	66.54	67.80	70.55	75.86
	,, of the Minima	54.92	51.45	52.77	51.32
	Absolute Mean	60.75	59.62	61.66	63.59
	Mean of 10 preceding years	59.88	.	.	.
	Extreme highest	16th 76.00	1st 77.00	1-2nd 80.00	18th 87.50
	,, lowest	4th 45.50	4th 43.00	25th 43.00	4th 39.00
	,, range	30.50	34.00	37.00	48.50
	Mean daily range	14.83	19.35	17.80	24.54
	Greatest ditto	27.00	.	4th 30.00	.
	Least ditto	6.00	.	17th 7.00	.
	Maximum in the Sun	.		.	2nd 100.00
	Minimum on the Grass	.	.	.	4th 33.00
Barometer.	Mean at 9 a.m.	30.245	29.56	29.352	29.945
	,, 9 p.m.	30.261	8p.m. 29.59	29.315	.
	Extreme highest	14th 30.532	14th 29.85	14th 29.620	28th 30.310
	,, lowest	5th 29.724	5th 29.10	5th 28.890	6th 29.540
	,, range	.808	.75	.730	.770
Dew Point.	Mean at 9 a.m.	55.80	.	57.17	56.43
	,, 9 p.m.	54.20	.	55.93	.
	Days fine	23	16	22	.
	,, dull and variable	.	.	.	.
	,, on which any rain fell	8	15	9	.
	Quantity of rain in inches	2.16	.	1.480	1.08
	Evaporation	.	.	3.144	4.36
	Thunder and lightning		.		.
	Prevailing Winds	NW.	NW. SW.	NW. SW.	NE.

TO CORRESPONDENTS.

Communications have been received from Mr. Cotton; Mr. R. Allen; Mr. J. Burman; A. J.; Mr. F. Buckell; Dr. L. G. Lewis; Dr. Oke; Dr. W. H. Cullen; Mr. Jesse; Premium; C. A.

Mr. Crompton's communication respecting his Report on Burns and Scalds will appear in our next number.

Rusticus,—We shall be glad to hear further.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

OBSERVATIONS ON DISLOCATION.

By JOHN JESSE, Esq., F.R.S., &c.

(Read before the Manchester Medical Society.)

Few accidents are more common than dislocation; none involve the character of the surgeon or happiness of the patient more completely. An ill-managed dislocation, or the nature of the injury overlooked, renders the limb less useful, life less agreeable, and for ever impugns the anatomical and surgical knowledge of the practitioner. Mischief, quite as grievous to the patient, may arise from imprudence in the time and mode of reduction, for want of clear ideas on the subject. The analysis of cases faithfully recorded forms an important part of the source whence the following axioms are deduced, and it is my intention to support each doctrine by the evidence of fact. As we are this evening to discuss principles in reference to dislocation generally, the cases cited will chiefly refer to the hip and shoulder. These joints are selected from their importance, the frequency of their injury, and the formidable resistance they are capable of opposing to reduction. The practice which enables us to subdue these cases points out the course to treat all others with success.

Dislocation is the removal or displacement of articular surfaces from their natural position.

Simple dislocation may be either Complete, or
Incomplete;
Compound, or
Complicated.

It may also arise from Relaxation of the ligaments;
Accumulated synovia;
Loss of muscular power; or
Ulceration.

We will confine the question generally to dislocation where the parts immediately prior to displacement, were in a normal state, and referring to the abnormal condition, only where it is required to illustrate the present question.

The force requisite to dislocate a limb depends on the structure of the joint, the position of the axis of the limb and the state of the muscles at the moment the disturbing power was applied. When the muscles are unprepared a very slight shock will produce the mischief, but when the muscles are aware of the approaching danger the force must be considerable. The danger is in direct ratio to the violence, and displacement is only a part of the evil; when this is excessive the injury is not confined to the ligaments, but the muscles themselves are often lacerated, sometimes severely so. Old persons are less liable to dislocations than middle-aged; the bones in advanced life are more brittle, and the force requisite to dislocate breaks them. Young children are also more liable to fracture than dislocation.

The liability of a joint to dislocation has direct reference to its structure. Where the construction of a joint is such as to admit of extensive motion, the disposition to displacement is greatest, and luxation having occurred, leaves the joint susceptible of displacement from comparatively slight causes. This state is brought on by the imperfect manner in which the reparation of the injured ligaments take place. The force displacing the bone tears the ligament more or less, and this partly depends on the direction and impetus at the time of injury. In cases where the capsular ligament is lacerated only to an extent sufficient to allow the head of the displaced bone to pass through, the smallest amount of mischief is done, but in violent injuries any quantity up to the entire capsule may be divided, placing the patient, on recovery, in the least favourable state as regards his liability to recurrence of dislocation. In as brief a manner as possible I will cite three cases to illustrate what I mean.

Jane Dakin, aged 17, was carried round an upright shaft in a mill making ninety eight revolutions in a minute, and was so injured as to die in an hour. There was a dislocation of the left os humeri into the axilla in this instance, the capsular ligament was torn across for three quarters of its entire circumference, and the tendon of the subscapularis entirely divided; there was but little extravasation of blood; she had bled profusely from the lower limbs, the legs being so lacerated and fractured that she must have lost both above the knee had she rallied.

William Sharpe, aged 26, fell down the shaft of a coal pit; the right thigh was dislocated upwards, and there was fracture of the skull. He was dead when taken up. In this instance the capsular ligament was entirely divided, as also the ligamentum teres.

Mary Irvine, a girl, fell down the hoist in a cotton

mill. She was brought to the hospital, where she died from the injuries she had received. The head of the femur was dislocated upwards. There was a fracture through the acetabulum. (The preparation was exhibited.) The capsular ligament was entirely torn away, as well as the ligamentum teres. It is probable a violent shock on the trochanter in descending the well produced the fracture, and the dislocation took place lower in the descent.

These are severe cases, and an important lesson is learned from them,—viz., the importance of keeping the patient quiet, and attending to local inflammation for weeks after. More or less of injury is always done to the ligaments under ordinary circumstances, yet dislocation may occur without it in cases where the capsular ligament is greatly relaxed, permitting partial or even entire dislocation, without lesion; these are, however, very rare cases. This relaxed state of ligament is abnormal, and we shall have to refer to it afterwards.

Extravasation of blood is another evil attendant on dislocation, and although not usually troublesome, is far from being unattended with danger. When the quantity is considerable, the difficulty of ascertaining the precise nature of the injury is proportionably increased. In extreme cases the skin is put on the stretch, and has an elastic feel. In this state it is very difficult, sometimes impossible, to ascertain the nature of the injury by examination. The direction of the axis of the limb should be observed attentively, and the position of the hand or foot; valuable information will thus be obtained, especially in hip cases.

In delicate persons of all ages, extravasation, especially if combined with much bruising, proves troublesome and dangerous, occasioning constitutional disturbance, and in extreme cases sloughing. Unfortunately the patient who has just had a limb dislocated is often the recipient of other injuries, and an accurate examination of them is of the greatest importance. This remark has especial reference to all cases where much violence has *supervened* falls from buildings, from horseback in hunting, carriage and railway accidents. In these cases it may be necessary to wait many hours before any attempt is made at reduction, for if the injury has disturbed the balance between the circulating and nervous systems, the vital power will be at a low ebb, and the shock attendant on reduction may extinguish life; and this is equally true in reference to all operations necessary for the relief of accidents. Where organic lesion is suspected, we cannot be too cautious in attempting the reduction; internal hæmorrhage may be destroying the patient, and humanity would willingly spare the dying sufferer an unnecessary pang.

In those cases where many days have elapsed, the nature of the case not having been made out, or ill-directed fruitless attempts made to reduce, difficulties of an almost insurmountable nature present themselves. Extravasation of blood is generally present; effusion of fluid from inflammation is sure to be there; the tension is usually great; the tenderness of the surrounding parts excessive; the pain in the region of injury is of a dull obtuse kind, but greatly aggravated by any attempts at motion. The limb, which at first admitted of some little motion, is now firmly fixed; the muscles are rigid, permanent contraction having taken place. An examination under these circumstances is always limited, from the suffering it inflicts on the patient, and too often most unsatisfactory to the inquirer, who, after mature deliberation, feels incapable of deciding as to the nature of the injury. Cases of this class are occasionally complicated with fracture of the bones near their extremities, with laceration of the muscles, and injury to the vessels; this last evil is fortunately of very rare occurrence.

We now come to the important question how to treat dislocation. There are a variety of means auxiliary to reduction by extension with the hands, and their election or rejection will depend on general circumstances. There can be no question as to that plan being the best which enables the surgeon to replace the bone with the least injury to the parts, and slightest ultimate mischief to the constitution.

1. In persons of delicate fibre and feeble constitution, mere extension will very generally be all that is required, the resistance being surmounted by a very moderate degree of power, and without the aid of mechanical assistance.

2. The next in degree will be easily overcome by vomiting, excited by irritating the pharynx, or by the action of ipecacuanha or emetic tartar.

3. Severe cases require the assistance of the lancet, and bleeding to faintness is a most powerful remedy. The muscles in this state offer, in many cases, very little resistance, and the displacement is easily remedied.

4. The combination of the warm bath at a high temperature, bleeding from the arm to fainting, with emetic tartar in sufficient dose to produce full free vomiting, with depression, and mechanical aid (the pullies,) are the means available in the severe cases. These means judiciously selected or combined, and firmly persevered in, will never disappoint the practitioner. It must not, however, be forgotten that reduction is made with the view to perfect relief, and if these all-powerful remedies are carelessly or imprudently used, the condition of the patient may be worse on reduction than it would have been by the formation of an artificial joint.

In using the pullies, extension ought to be made gently, and gradually increased so as to extend the muscular fibre without injury; attempts to reduce dislocation quickly are proper only where the muscles are unprepared for the shock, and when very moderate power applied unexpected by the patient, replaces the bone. In applying the pullies, the principle for which they are used should be ever before us; they afford

any requisite amount of power, and without fatigue to the operator, maintain that power. The application of this power should be gradual—never sudden; the object is to extend, not to lacerate, the fibres of the muscles,—to apply a force at first so moderate, as merely to stretch the irritable fibre, and to wait till its immediate contraction is exhausted, and then again to tighten the cord, or, in other words, apply more power, again pausing when vigorous resistance is made, and waiting till relaxation again assures that further extension can safely be made. It rarely happens that any permanent mischief is done by the proper application of the pullies, but I know of no instrument more mischevious when carelessly used. Extension suddenly made, and rashly continued, may so injure the muscles and nerves, as to render the limb less useful, or entirely useless, or even strip the skin from the fascia. In this state, even if reduction be effected, the subsequent suffering of the patient, and a useless or greatly impaired limb may give rise to melancholy reflections in the patient's mind, and perchance raise a surmise as to his probable condition had it been left to nature only, and too often he will come to the conclusion that severe suffering purchased for him no immunity from mutilated usefulness.

We will now proceed to consider the cases of dislocation proper for delay, and those for immediate treatment; the former include the abnormal, the latter the normal states.

1. Cases of acute or subacute inflammation producing dislocation.
2. Dislocation from ulceration.
3. Dislocation either complete or incomplete, as in ordinary cases.
4. Dislocation in powerful persons, (or drunken.)
5. Dislocation of some standing.
6. Dislocation complicated with other injuries.

As a general rule, all dislocations from abnormal causes should be left to medico-chirurgical treatment. They are usually sufficiently obvious. Certainly a careful examiner will not be deceived. The hip-joint is liable to acute and subacute inflammation, the result of accident or disease; and this state is often complicated with effusion of fluid, lessened muscular power, and ulceration. In each of these states we are consulted, and the following is the usual outline of the case:—Master or Miss, (for they are usually young people,) has had a fall, or slipped in coming down stairs, and the parents are afraid the hip is out. On examination the hip is hotter and fuller than the healthy side, the foot turns either way in the early stage, and the limb is very little shorter. In the onset of this disease the limb is often longer; the limb is not fixed, and can be rotated outwards to some extent, as also moved in flexion and extension. When in a little more advanced state, and the limb shorter, gentle extension restores the limb to its proper length; but on releasing the limb it again assumes the shorter position. The appearance of the patient usually indicates impaired health. On inquiry you are told he has felt occasional pain in the hip and very often in the knee; the friends have fancied him lame, but nothing of importance till the fall. Sometimes an accident can be traced back some weeks ago. Now, the fall is the result of disease; the increasing lameness hitherto unnoticed produces the accident, and from it the parents or friends erroneously date the commencement of the case. When these patients come under the notice of well-educated men, the disease is at once recognized and explained to the friends, and the necessary local and constitutional treatment at once commences. But woe to the unfortunate whose lot is with the pretender; loss of the joint, often of life, is the result.

May 10th, 1834. Henry Burrows, aged six, was brought to me; having fallen down stairs, his left hip was supposed to be dislocated. On examination I found the head of the femur resting on the upper edge of the acetabulum; the hip felt hot and inflamed; by very gentle extension it could easily be drawn to its proper place, but resumed its abnormal position when released. He was put to bed, and subjected to local and constitutional treatment. In a month he was well. He was then sent to the sea coast for a few weeks, when his general health became good. The hip has given no trouble since.

In 1835 a physician consulted me on his son's case, a boy about five years of age; he had a fall, and his right hip was swollen and painful; the head of the bone could be distinctly felt at the edge of the acetabulum. His mother told me she fancied he had limped for a month on the right foot, and had complained of pain in the outside of the knee. He was growing fast, and the occasional pain was attributed to this cause. I explained my views, he was properly treated, and in six weeks recovered. He has remained well since.

These are common cases, and frequently very troublesome; if mismanaged any amount of misery may ensue, often death. There are two preparations on the table where this state of disease was treated as dislocation from accident by a celebrated bone-setter; both, after protracted suffering, perished.

The preparation No. 20 was taken from the left hip of a very interesting girl, aged 12. I saw her twelve months after the commencement of the disease; she had met with a trifling fall, but was lame of the left foot after, and not being better at the end of a week, she was conveyed to a far-famed bone-setter; he pronounced the hip out. In this he was probably correct, but assuredly not in his practice. The limb was extended and twisted in various directions, a large plaster applied, and a tight bandage. The pain increased to agony; the doctor assured them all was right, and something was given to lull the pain; the bandage was not removed; at the end of a week the

patient was so ill the parents became alarmed, and a well-informed practitioner saw her. The bandage, &c., were removed; an abscess had formed, caries followed. When I saw her, which was about a month before she died, the limb was nearly three inches shorter than the healthy one; the knee turned inwards, and the sole of the foot rested on the tarsus of the opposite side. She had three or four sinuous openings in the vicinity of the hip; from one below Poupart's ligament the discharge was profuse. She was hectic and much emaciated. The disease from the commencement to its termination occupied thirteen months.

The preparation No. 24 was taken from the right hip of a very promising youth, aged sixteen. He was nearly falling in dancing, from slipping, and made a vigorous effort to save himself; in so doing he fancied something cracked, and he endured for a moment acute pain, but felt little more of it that evening; the next morning he was slightly lame, felt an uneasy sensation in the groin at intervals, and for two or three days was feverish. At the end of a week he was so much better that he accompanied his family on an excursion into Cheshire; there he became again feverish, walked with a limp, and had pain in the hip almost constantly, and sometimes rather severe. Unfortunately he was only twelve miles from this town, and the repute of the far-famed bone-setter was such that he was sent for, and he at once pronounced it a dislocation; this was ten days from the dance. The unfortunate youth was subjected to an extension made by three powerful men, and he was subsequently plastered and bandaged; severe pain succeeded, he spent a wretched night, and the next morning vomiting and other urgent symptoms made their appearance. A most efficient surgeon now saw him, and from this period he was well treated. In a month he was much better but lame, and always worse when he attempted to walk. He was now taken by easy stages to town, and placed under the care of a distinguished surgeon. A tumour just below Poupart's ligament now made its appearance, and he had restless nights and profuse sweats. It was now ten weeks from the commencement of the case; in two more weeks there was distinct fluctuation, and from the position of the tumour it was supposed to be psoas abscess, and an opening was cautiously made; three to four ounces of matter flowed from the aperture, which was immediately closed. He continued to emaciate, and had constant pain in the hip; country air was now recommended. The punctured part gave way, and he had a profuse discharge of ill-conditioned matter, and a probe introduced touched a denuded bone. The limb now shortened rapidly, and the knee turned inwards, and experiencing no relief he was taken home into Cheshire. six months from the first attack, by short stages, and at a very slow pace. When he had been nine months ill I saw him: he was the wreck of an amiable and talented youth, hectic, with a rapid pulse, night sweats, extensive incurable disease of the hip, and cough and tubercle. He died eleven months after the first attack.

Dislocation is occasionally the result of ulceration; it would occupy too much time to enter on the subject. There is a fine specimen on the table, taken from a boy, aged 15. He was scrofulous, met with a fall, and in ten months you see the state amputation relieved him from.

Dislocation, the result of accident, may be defined the removal or displacement of an articular surface, from the corresponding articular surface opposed to it in its natural state. The sooner a dislocated limb is restored to its natural position the better, provided such reduction can safely be borne by the patient. Many of these accidents require little force to replace, and may be done at once by a skilful surgeon, with little inconvenience to the patient. In dislocation of the shoulder, the heel in the axilla and extension at the wrist, or the knee in the axilla, very often succeed; the former is, perhaps, better calculated for general practice.

January 26th, 1834. Richard Hodgkinson, aged 44, seen at 9 p.m., within an hour of the accident. He had fallen from the Peveril coach; the right humerus was in the axilla; he was laid on a sofa. Pushing the heel into the axilla, I made extension at the wrist, rotating inwards, and the humerus passed easily into the glenoid cavity.

September 1st, 1837. Mr. J. J., aged —, fell on the green, at Ardwick, about ten at night. His left shoulder was dislocated. I placed my knee in the axilla, conversed with him a few minutes, and when I fancied his attention was engaged, I brought the elbow suddenly towards the side; the reduction was instantly effected.

These plans, however, do not always answer our wishes, not even within five minutes of the injury.

March 18, 1828. Thomas Stringer, aged 28, Ardwick Green, a groom, was thrown from his horse. I was passing at the moment, and was requested to examine him. His home was not more than fifty yards from the place of accident, whither he was immediately conveyed. In this instance I could not move the head of the humerus by extension at the wrist with the heel in the axilla. A roller towel was placed round the affected shoulder, and secured to a fixed point, and two stout men made extension from the arm, but the power of the muscles set at nought all their efforts. I now bled him till he was faint and vomited; extension was again made, and the reduction effected without difficulty. He returned to his employ in a fortnight.

August 11th, 1832. William Carrill, aged 29, Chorlton-upon-Medlock, by trade a joiner, had fallen from the roof of an unfinished house into the cellar, four stories. He had fallen through the joices of each floor, but could not maintain his hold: this was at nine a.m. I saw him at ten; he was bruised in many parts of the body, but had received no serious injury, the shoulders being the chief grievance. The head of the right humerus was dislocated into the axilla; the head of the left humerus was dislocated on the dorsum of the scapula, just below its spine. This latter case is not very common. There was a hollow immediately below the acromion, and the head of the bone was most distinctly felt. I should say it was scarcely possible to mistake the

nature of such a case. My assistant, Mr. Thomas Hudson, now of the Ardwick and Ancoats Dispensary, assisted me to reduce them. A strong roller towel was applied round the chest, keeping the upper margin below the head of the humerus on the left side, and secured firmly to the end of the sofa; then extension was made on the right arm, but in vain, the power of the muscles firmly resisting the attempt to reduce. He was bled from the left arm till very faint, and then, after a vigorous effort, the right humerus snapped into the glenoid cavity. The roller towel was now reversed and secured to the opposite end of the sofa, and extension made on the left humerus. At this moment he was excessively exhausted and faint; we easily reduced the dislocation. He recovered without any untoward circumstances, and in five weeks resumed his usual avocations.

Dislocation in young children or aged persons seldom occurs; the force requisite to displace, usually fractures. There are, however, occasional exceptions both in age and youth.

September 9th, 1815. William Mather, aged 5, had his right thigh dislocated on the dorsum, occasioned by the shaft of a caravan falling upon it. The limb was shortened, the knee and toes turned inwards, the middle of the sole of the foot rested on the tarsus of the opposite foot; any attempt made to rotate the limb gave great pain. The pelvis was fixed by a long towel in the usual way, a wet roller was applied above the knee, and over this a tourniquet tape was buckled so tight as only to admit the hook of the pulley, which was then fixed to it. Extension was then made, and in a few minutes the head of the femur passed into the acetabulum with an audible snap; he was put to bed and was well in a week.

In aged persons extension should be made with every care; in advanced years the tendency to ecchymosis is a most serious inconvenience, and very slight pressure occasions extravasation.

August 25th, 1837. Mrs. Wall, aged 80, had a fall, and dislocated the left os humeri forwards, with fracture of the humerus about an inch from the cervix. I made extension very gently with the hands, and after a few minutes by pressing against the head of the humerus, (extension being continued,) restored it to the glenoid cavity. The forearm was placed in a sling, and a spirit lotion applied; the next day the extravasation was most extensive; a fortnight elapsed before it was safe to apply a light bandage and splint; at the end of a month the extravasation was absorbed, the limb was then put in splints, and at the end of three months she could use the arm perfectly.

Extravasation more or less occurs in middle-aged and young persons in injuries of the joints, sometimes to such an extent as to render it impossible to ascertain the nature of the case. Under such circumstances medical treatment must first subdue this evil, and then if dislocation exists it must be attended to. An explanation of this state will usually satisfy the patient and his friends; at all events never apply the pullies till the case is clearly made out. In the state above described fractures are very difficult to detect, and the patient gets wearied with the suspense he remains in,—a dread of something very bad till the uncertainty clears away. It is always well fully to explain the nature of such cases to the friends; it removes the possibility of their justly casting reflections after. I shall just cite two well-marked instances of this difficulty.

Mary Johnson, aged 20, a stout young woman, was admitted into the London Hospital, at midnight, in the autumn of 1822, while I was a dresser to Sir William Blizard. She had fallen while running down the hill in Greenwich Park, and some dozen persons tumbled over her; she was bruized in many places, but severely nowhere, except the left hip, which was enormously swollen; the knee was turned inwards and rigidly fixed there; the limb was about an inch shorter than the other. Thirty leeches were applied to the hip, and a large hot poultice; she took the aperient house medicine. The next day, early, thirty more leeches were applied, with anodyne fomentations and poultices often changed. Towards evening the tension began to subside, but three days elapsed before any satisfactory examination could be made, and it was a month before she was sufficiently recovered to leave the hospital, This case might have been mistaken for dislocation in the ischiatic notch, for I have seen cases where there has been much extravasation and very little shortening, the toe inwards, and the limb only an inch shorter.

March 5th, 1844. Mr. Henry Jackson, aged 38. Visiting a patient in Chorlton cum Hardy, I was requested by a surgeon to see this case. At midnight he was returning home with some friends, and fell over a stone left in the way. The night being very dark, he does not recollect how he fell, but he made a vigorous effort to save himself; he felt a severe pain in his right shoulder and the right arm became useless. He was assisted to bed and after some time slept. In the morning his shoulder was very painful and much swollen, and as the swelling continued to increase, and become very painful, he sent for his surgeon, who requested my opinion at five p.m. At this period the shoulder was excessively swollen, quite round, firm, and elastic. I introduced a finger into the axilla; the head of the humerus was not there, and on slightly rotating the elbow I could perceive no crepitus. He could not move the arm. The coracoid process could not be felt; placing the left hand on the shoulder, the thumb pressing on the position occupied by the coracoid process, and the fingers on the spine of the scapula, with my right I gently raised the elbow, and by a slow upmovement detected crepitus; the inference was that a fracture of the cervix of the scapula existed. He was subjected to active treatment, and four days after, the effect of leeches, spirit lotion, purgatives, &c., had so far reduced the swelling that there remained no difficulty in ascertaining a fracture through the neck of the scapula. He was quite well on the 10th of May.

In persons who have suffered much from rheumatism,

or are of highly nervous excitable temperament, an insurmountable dread of submitting to a fair examination occasionally exists, and to such an extent does this sometimes proceed, that weeks may elapse before the patient permits an inquiry from which a just deduction can be made. In some the fear of pain, in others an invincible disgust to being touched,—yet these very patients are not slow to calumny in case their morbid feelings produce evil. Where we are permitted to be mere spectators only, we should at least be excused all blame in the result.

Mrs. Jane Maidin, aged 62, fell in the yard of one of the offices in Princes Street, on the evening of October 8th, 1843, and injured the left hip; it was late at night, she was got to bed, and I saw her about 11 a.m., the next day. There was very little swelling, but she complained of acute pain in the region of the hip-joint; she said the slightest pressure in the anterior region of the joint gave acute pain; the limb was an inch and a quarter shorter, the great toe turned outwards; she would not permit the slightest movement of the limb, and shrieked with frightful violence on my drawing the foot slightly downwards. As she was a slender and rather feeble person, I directed fomentations, and Extr. Hyoscyami, gr. iv., every three hours. She continued to use this for ten days without benefit, and then Linim. Saponis, with Tinctura Opii. After a fortnight she was no better, and shrieked as before if the limb was touched. On the 25th October, Mr. Wilson saw her with me; and before seeing the case which I gave him the history of, we made up our minds to have an examination. Mr. Wilson placed his right hand on the trochanter, I drew the limb to an equal length with the other, and rotated it freely, and afterwards gave it free flexion. The conclusion we came to was, that there was no fracture, and that the head of the femur was in the acetabulum, and the symptoms the result of contusion. She described the pain of this examination as horrible; certainly she gave ample evidence of not enduring the torture in silence. Mr. Wilson again saw her on the 2nd of December; she was then moving about on crutches, could rotate the foot moderately well, and raise it a little from the floor. Stimulating liniments have been perseveringly used, but she still continues to use a crutch, or two sticks. She has suffered very much from rheumatism; both hands are swelled and deformed from the malady, and it is probable the same diathesis exerts its evil influence in the hip.

We now come to the class of cases where great muscular power, drunkenness, or delay, present the utmost amount of difficulty. The union of all our means are equal to the task only when judiciously begun and perseveringly continued.

Jonathan Rowcroft, aged 30, was a remarkably fine man, about six feet two inches high, and one of the most powerful muscular subjects I have ever seen. He had fallen with his left arm extended, and dislocated the humerus into the axilla. He refused to be bled. Six grains of emetic tartar in warm water were given at wice with an interval of ten minutes. He was secured to a ring in the surgery with the usual bandage to command the scapula, a roller wetted with spirit lotion was applied to the arm, and extension slowly made with the pullies. He bore the extension without a murmur, which was increased whenever the muscles relaxed, and this was continued for forty minutes, when the head of the bone slowly resumed its place in the glenoid cavity. The force employed towards the close was tremendous. He walked off as if nothing had happened, nor would he have used a sling had I not insisted upon it. The next day there was scarcely any swelling of the arm. He had no pain, but said he had been severely purged. He was ordered Lin. Saponis, and cautioned not to use the limb. In a fortnight he was well.

—— ——, a strong burly fellow, was in the employ of Mr. Cullan, and fell in the stable about three in the afternoon; he had drunk six glasses of gin, and about six pints of beer; he was drunk, but knew what he was doing. The accident had been done about a quarter of an hour. A roller towel was passed round him to command the scapula, and fastened to a ring in the stable; another long towel was noosed round the arm above the elbow, and three powerful brewers made extension in vain. I now bled him to two pints; he became faint and vomited. We again made extension, a fourth person pulling at the wrist, and after an extension of fifteen minutes it was reduced. The next day his arm was painful, and bore ample testimony to the violence we had used. He recovered well, and went to work in less than three weeks.

I have often observed the difficulty drunkenness produces, and the best plan, as a prelimenary, is to bleed, and afterwards produce vomiting with emetic tartar.

April 9th, 1838. Mr. William Crispin Watmough, a powerful man, aged 35, from the breaking of an axle, was pitched from the box of a coach, and sustained a dislocation of the right hip, a severe contusion of the right wrist and other injuries. The accident took place at Longsight. I saw him about 5 p.m., an hour after; he was very faint, and I had to send home for the pullies. Several medical men had been sent for. Mr. Barton came. The patient was placed on a mattress, the usual band secured the pelvis, and was fastened to the bed-post, the extension of the thigh being made obliquely across the bed from the opposite corner. His pulse having risen, he was bled to thirty ounces, and ten grains of emetic tartar in warm water were given in three separate parts; in ten minutes he became very sick and faint; extension was now made, and reduction effected in twenty minutes, the head of the femur passing with a distinct snap into the acetabulum. He was not my patient, but I heard from his surgeon that the hip gave no further inconvenience, and he recovered well from the other injuries.

In cases of dislocation which have existed for some weeks, either being overlooked, or from the circumstance of other injury, as fracture, the first question to consider is how far the patient will be benefitted by reduction; and in case of failure, how far the condition will be made worse. The constitution, as well

as the age and general appearance of the limb, will suggest important points for reflection. In all dislocations of the hip, it is very desirable to reduce, if it be possible. In the shoulder, by far the most common dislocation is into the axilla; and the constant pain the head of the bone causes by pressing on the nerves, renders reduction imperative. When the dislocation is forwards, it is more a matter of choice with the patient. In this position an artificial joint readily forms, and the patient is not much the worse for it. The natural, however, is ever preferable to the artificial, and if you can, always reduce; for, however beautiful the process of reparation may be in forming a new joint, still the limb, though very useful, is never quite so perfect. I will now relate a very severe case of dislocation into the axilla, in an aged person, of five weeks' duration, and I was particularly induced to make the effort, as the patient declared she could not live as she was.

Mrs. Hannah Lee, aged 67, Heathcote Newhaven, near Buxton, consulted me on the 6th of July, 1834. She said she had fallen, from her foot slipping, five weeks ago, and injured her right shoulder. The limb became useless, and she had considerable pain. She sent for a surgeon. He prescribed fomentations and liniments. She was told it was not broken or out. There was very little swelling at the time, but the pain had been constant. Her health was suffering, and her remark was, I must be relieved from this pain or it will kill me. She was a very fine healthy-looking woman. I told her the nature of the case, that the head of the bone was in the arm-pit, and considerable difficulty might be experienced in reducing it. She decided to have an attempt made at reduction in the evening. The head of the humerus could be distinctly felt in the axilla; there was the usual hollow below the acromion, and the flexor muscles had begun to contract the fingers; the arm hung useless by her side. She was seated (having removed her stays, &c.,) between the posts of the bed; a long towel was carried round the chest, and secured to the post on her left side; she was bled to a pint, and six grains of emetic tartar were given in ten minutes, in three doses. A roller wetted with spirit lotion was applied to the arm, and the bandage and hook secured over it; the fore-arm was bent to a right angle with the humerus, and the arm slowly raised till at a right angle with the body, and one box of the pullies was connected with the hook, the other box being secured to the bed-post. She was now very sick and faint, and extension was slowly made till the muscles were on the stretch, and from time to time the extension was gradually increased, as the muscles were observed to give way, and this was continued for an hour. At this period the case assumed a very unfavourable aspect; she had been pulseless for fifteen minutes; the skin was cold and clammy; the respiration laborious; the expression one of subdued agony; the head of the bone had not moved. I grasped the shoulder with both hands, and endeavoured to aid the pullies by forcing outwards the head of the humerus with the thumb; after three or four attempts the head felt as if it were yielding to the pressure, and finally the head of the humerus was slowly restored to the glenoid cavity, without any snap or noise, the extension having been continued seventy minutes. A large soft compress was placed in the axilla, the elbow brought to the side, the fore-arm supported in a sling; she was placed in bed, and small quantities of brandy often given. Three hours after a very small thready pulse was felt at the wrist, the stomach rejected everything, and the skin was cold. Ammonia, Brandy, and Tinct. Opii., gtt. xl.; the stimulants to be continued during the night. Bags of hot bran were applied to the stomach and feet. The shoulder was not much swollen, but some extravasation was going on. It was kept covered with cloths dipped in warm spirit lotion. On the 7th the pulse was firmer; skin warm; stomach irritable. The stimulants were continued, with sago, &c. The shoulder was easy, but much discoloured by extravasation, which was very extensive below the clavicle. She was much better on the 8th, the shoulder easy, and no further extravasation. From this time she gradually improved, and was sufficiently well to return home on the 19th. Mr. Thomas Fletcher, of Longsight, an intimate friend, was present at the reduction, saw her six months after in Derbyshire; she was in good health, and the arm as useful as before. She is still living in the enjoyment of excellent health.

I was requested to meet Mr. Harrison, in Withy Grove, to see a case of unreduced dislocation. We were joined by Mr. Wilson; this was in the evening of the 19th of January, 1840. Mr. Marks, aged 60, had fallen down ten or twelve steps, going into the warehouse, on the 23rd of December, 1839. The gentleman who first saw him suspected a fracture through the trochanter and applied splints, confining him to his bed on his back, &c., &c. We met and removed the dressings. The head of the femur was distinctly felt on the pubis. He was bled to a pint, and Mr. Harrison sent to a druggist for ten grains of emetic tarter. It was mixed by an attendant in a tumbler of warm water, and one-third part given every five minutes. In twenty minutes he was not sick, and we sent for ten grains more, and received for answer, he had sent a drachm in mistake. On the announcement of this horrible blunder his fauces were irritated with a feather, and he drank largely of warm water, and vomited freely half an hour after he took the first dose of the antimony. The extension now commenced, and in forty-five minutes the head of the femur passed quietly into the acetabulum. An ounce of Infusum Cinchonæ was now ordered every hour. In the morning he was better, and seemed to have escaped the ill effects of the antimony, and no bad symptom made its appearance after. I saw him after a lapse of six months, he walked well but used a stick, and said his hip felt weak.

Mr. Robert Garnett, aged 45, Preston, stated that he had been injured by the upsetting of a coach near Newcastle, in Northumberland, three weeks previously, and that his right arm had been broken near the shoulder joint. He was attended by a surgeon, who

put the arm into splints. On arriving at his residence in Preston, he fancied the limb did not improve, and he came to Manchester to consult me. On removing the splints and dressing a dislocation forwards was distinctly seen; there was very considerable swelling at the time of the accident, and I fully explained to him the almost insurmountable difficulty of ascertaining the true nature of the accident. Under such circumstances, I advised him to use the arm gently, to rub the shoulder with Lin. Saponis, and to take a liberal diet. In four months he could use the arm fairly, and eight months after he had nearly as much use as before, a new joint having been formed. Neither the age nor time were unfavourable to reduction, and I have no doubt it would easily have been effected, but grave reasons prevented me making the attempt. His constitution was a delicate one; on a former occasion a wound of the thigh healed with great difficulty. There was cough, and tendency to tubercle. Had the humerus been in the axilla, pressing on the nerves, he must have had the limb reduced, and the result would have been doubtful. As it was in so favourable a position for his future comfort, I thought it right to adopt the palliative plan.

There is one dislocation sometimes very troublesome to reduce, I mean dislocation of the last phalanx of the thumb; were a case of this kind to present itself, for as yet no case of this nature has ever foiled me, I should not feel inclined long to continue the extension, but proceed to divide the tendon at such a distance as not to endanger an opening into the displaced parts. My reason for this opinion is the following case:—

Patrick Murphy, aged 30, a joiner, fell down some steps with his basket of tools in his hand; unfortunately his left hand went into the basket and was severely cut; he had a dislocation of the last phalanx. It was easily reduced, for the incised wound included a division of the flexor tendon, about the middle of the phalanx next to the metacarpal bone. He was told the thumb would in all probability be stiff as far as related to the last joint. The wound healed by the first intention, and six months after I saw him accidentally, he immediately came and shewed his thumb, which he said he could use as well as ever. Certainly he had perfect extension and flexion.

In this metropolis of commerce we meet with dislocations complicated with every kind of injury, and under every variety of forms, from accidents in the manufacturing and mining departments and railways. In these cases it often happens that the dislocation is a trifle compared with the other injuries. I will cite one case to explain what I mean.

August 1st, 1823, twelve at noon. Esther Smith, aged fourteen years and a half. The accident took place about ten o'clock, at Chowbent, and she arrived at the infirmary, Manchester, at noon, where I then resided as house-surgeon. The left arm torn off near the insertion of the deltoid; oblique fracture through the middle of the right humerus; dislocation of the elbow, radius and ulna, outwards and fracture of the radius and ulna through the middle of the forearm. First I secured the artery high up, then reduced the dislocation, then did up the fractured humerus in splints, and afterwards the forearm. At this moment Mr. Hamilton came to my assistance, he pared the torn ends of the muscles, and shortened the projecting bone. The edges of the wound were brought together by straps of plaster, and an opiate given. This case did well, and she returned home in a few weeks in good health. I heard of her some years ago; she then held a respectable situation in the counting-house of the establishment where the accident happened.

It is unnecessary to relate any other examples of complicated injury in my professional career of upwards of a quarter of a century; many have occurred, but not always with so favourable a termination.

SHORT NOTES OF THE OPINIONS AND PRACTICE OF THE LATE JOHN PEARSON, ESQ., F.R.S., ON SYPHILITIC DISEASE.

By W. S. Oke, M.D., Physician to the Royal South Hants Infirmary.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

Sir,

It is my intention to send to the *Provincial Medical and Surgical Journal*, as regularly as I can, a series of short notes of the opinions and practice of the late Mr. John Pearson, F.R.S., in syphilitic disease; and I entertain the hope that they may not be altogether uninteresting to your readers.

These notes have been abbreviated from a MS., which, I believe, for the most part may be relied upon.

The late Mr. Pearson practised surgery in London, at the latter end of the last, and during a considerable part of the present century; he was a Fellow of the Royal Society; Senior Surgeon of the Lock Hospital and Asylum; Surgeon to the Public Dispensary, &c. He was also the author of several valuable and practical works, and a lecturer on the principles and practice of surgery.

So extensive were his opportunities of observing the phenomena of syphilitic disease, both in the Lock Hospital and in a large private practice, and so matured was his judgment by such a wide range of observation, that his opinion was greatly sought after, and on any doubtful point connected with this subject, was considered as final by the majority of British surgeons.

Sir Benjamin Brodie, in his "Lectures illustrative of various subjects in Pathology and Surgery," says, "I am much mistaken if the mercurial treatment of syphilis, as employed by the late Mr. Pearson, during the greatest part of his life, was not as nearly perfect as possible."

It was evidently the intention of the late Mr. Pearson, to have given to the public a work on lues venerea, as may be seen in a note at the foot of the seventh page of the introduction to his "Observations on the effects

of various articles of the 'Materia Medica,' in the cure of lues venerea," wherein he states, "the substance of which (his lectures,) I design hereafter to offer to the public in a treatise on lues venerea."

Unfortunately for medical science he did not live to carry out this design; and as twenty years have elapsed without the appearance of any intention to do so on the part of others, it seems right to put upon record, scanty and imperfect as it must necessarily be, any remnant that can be gathered from so eminent a surgeon, and so talented a man.

I remain, Sir,
Yours faithfully,
W. S. OKE.

Southampton, Nov. 4, 1847.

The term syphilis is used to designate a peculiar morbiferous poison, by which an absorbent surface, brought into contact with it, will become diseased.

It is necessary that the syphilitic poison be applied in a liquid state; it affects the parts of generation, the conglobate glands, the skin, the membranes and bones, but it never attacks the viscera.

The effects of syphilitic poison are primarily as a local, and secondarily as a constitutional, disease, in which several parts of the body are acted upon at the same time. The disease is usually attended by symptomatic febrile disturbance, caused in the one case by local irritation; in the other by the presence of the poison in the circulating system. There is no form of syphilis, either local or constitutional, which may not be connected with, or assume the appearance of, some other disease; whilst at other times its symptoms may be of an anomalous character.

Mercury, when it acts as a mineral poison, will produce all the local and constitutional symptoms of syphilis, and parts of the body most liable to be destroyed by the syphilitic poison, are more frequently destroyed by the use of mercury. The effect of mercury sometimes renders it difficult to form an accurate diagnosis, and experience alone will qualify the surgeon for a correct judgment between the two causes.

The susceptibility of becoming infected by syphilitic poison, differs in various persons, and in the same person at different times. Many have been exposed for years without the least caution, and have escaped infection, and yet after the lapse of ten or fifteen years passed in the same way, they have become at last as susceptible as others. The cause of this singular exemption is to be attributed to some peculiar condition of the body, which cannot satisfactorily be explained.

The interval between the application of the syphilitic poison, and the production of its local effects, is usually two or three days: this, however, will very much depend on the texture of the parts to which it is applied; sometimes even four or five weeks would appear to have intervened, but it is seldom that the interval is longer than seven days.

The parts behind the corona glandis, the folds of the frænum, or the prepuce itself, are the most common situations of primary syphilitic sores; and they sometimes occur on the inner margin of the urethra, upon the integuments covering the penis, the ossa pubis, or scrotum; but the glans itself is rarely the seat of the primary sore, and when formed upon the glans, it is probable that a previous abrasion of the cuticle must have taken place.

The Character of Chancre.—When the primary sore is situated on the internal surface of the prepuce, there is usually a small hard elevation, with a sore on its apex, surrounded by a circular inflamed base. It is generally painful from the beginning; it is sometimes concave, and at other times elevated, having raised edges, an irregular surface, and often a sloughy appearance. Its shape is commonly circular, but where there has been a breach of surface, it assumes the form of an abrasion.

It is sometimes extremely difficult to distinguish a true syphilitic sore from appearances only; sores, not venereal, so often put on a syphilitic character, and sores wanting that character so often turn out to be venereal, that even experienced observation hardly qualifies for an accurate diagnosis. A primary chancre is rarely met with on the glans, but when it does take place there, it is more superficial and less painful than when on the prepuce. On the common integuments it generally assumes the form of a pustule, having matter on the surface, which dries into a scab or crust. So much matter is sometimes formed that the speedy evaporation necessary for the production of the crust is prevented. This form somewhat resembles a vaccine pustule of about the sixth day. Those on the frænum are generally very painful. When a venereal ulcer forms on the finger in consequence of the matter coming in contact with a cut or sore which might be situated on it, the pain is usually severe, and the constitution becomes much disturbed; this is probably the result of the poison having deeply entered the tissues, and producing a disease similating paronychia. Chancres on the lower lip are not more painful than those situated elsewhere, nor are they attended with any peculiar symptom.

Where several sores appear at the same time, as on the internal and external parts of the prepuce, there may be presumption, but not a sufficient proof, that they are not venereal.

A person inoculating his finger with matter secreted by his own primary sore may infect himself;* but having primary sores he will not contract fresh chancres by repeated exposure.

Local Effects of Chancre.—When a primary sore is situated on the frænum, it is remarkably painful, and

* Mons. Ricord is now availing himself of this fact as a test for true chancre; but it is to be doubted whether such a diagnostic will long obtain in British practice.—*Lancet* Oct. 30, 1847.

sometimes ulcerates an aperture through it; whilst at other times it completely destroys it: in the latter case it generally ascends to the meatus urinarius and causes tumefaction at the lower part of the frænum. When situated behind the corona glandis, or on the internal surface of the præputium it not unfrequently occasions phymosis, which consists of a contraction of the extreme aperture of the prepuce, where the skin becomes thickened and tucked up; if the contraction takes place more towards the corona glandis, the orifice of the præputium may remain as large as usual, but there will be a peculiar contraction, as if a ligature were tied around the part.

Phymosis certainly takes place more frequently from this cause than from gonorrhœa. The contraction of the prepuce prevents the escape of the discharge from the sore, by which the irritation of the sore itself is greatly aggravated. From this cause the accumulation of the matter is sometimes so great, that by a gradually increasing pressure it finds its way out through the side of the prepuce, and forms an aperture through which the inflamed glans protrudes. When the inflammation subsides before the phymosis is remedied, adhesion usually takes place, which is partial at one or two points, or general, when the internal surface of the prepuce is everywhere united to the glans, except at the orifice of the urethra. The stricture is seldom so great as to prevent the egress of the urine; when it is so, gangrene may be apprehended. Sometimes the prepuce is forced very far forwards, and whilst the penis remains near the pubis.

When inflammation has existed previously to the phymosis, the pain is more severe, and the tendency to mortification greater, and if the prepuce be forced back under such circumstances, stricture will be formed behind the glans, and paraphymosis the result.

In paraphymosis the skin will be elevated into different folds, and will have a pellucid appearance, which has given rise to the name of crystallines.

Paraphymosis originating from different causes, may not be different in appearance; and when the contraction has remained for several days without producing gangrene, ulceration between the folds may take place, and adhesions form, which will probably for ever prevent the prepuce being drawn forwards to cover the glans. When mortification has supervened, the whole of the prepuce, and sometimes the glans itself will be removed; these circumstances may take place independently of any syphilitic cause. Hence it is most important that an accurate diagnosis should be made in these cases.

A large and rapidly spreading chancre is generally attended by severe pain and acute inflammation: gangrene is frequently the result; and when the glans is much excavated by it, hæmorrhage also may follow. When these symptoms are accompanied by a contraction of the prepuce, the case is very difficult of management.

If gangrene, as the result of chancre, comes on early, it may arise from a bad constitution; but it is more commonly caused by the use of mercury. When gangrene is cured by such means only as strengthen and support the system, it becomes questionable whether such cases were venereal. They were probably not so, but if they were venereal, mortification must have obliterated the virus, as excision might have done. Here again great caution is necessary in the diagnosis. Gangrene, supervening upon a true syphilitic sore from the use of mercury, will cease when the mercury is withdrawn; but then the sore will spread again, and when the mercury is resumed, the mortification will return. In this intractable state of things the penis is sometimes totally destroyed.

In some cases the first appearance of chancre is succeeded by violent inflammation of the penis, and complete sphacelation of the organ, which generally separates at the symphisis pubis. In this case it is probable that the inflammation proceeds more rapidly than the virus. There is much disturbance of the system, a small irritable pulse, and general emaciation. Even when the disease has been arrested by the most judicious treatment, the glans is frequently destroyed; the cells of the corpora cavernosa may become obliterated, and the corpus spongiosum also involved.

(To be continued.)

CASE OF UNUNITED FRACTURE, TREATED BY GALVANISM.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,—I herewith send you a case of ununited fracture, successfully treated by galvanism, an agent which I think has not been hitherto employed in similar cases; and if you can spare a corner in the Journal, perhaps the publication of it may induce some of our worthy members to test the efficacy of the remedy by a trial, which, if found successful in its application, may for the future render unnecessary those tedious and painful operations to which we are occasionally compelled to have recourse, in the treatment of these intractable cases.

I am, Sir, faithfully yours
JAMES BURMAN.

Wath, near Rotherham,
November 2, 1847.

Mr. Thomas Lister, about 35 years of age, a railway superintendent, of a robust constitution, regular habits, and a faithful disciple of Father Matthew, had the misfortune, in the summer of 1845, to fracture his leg by being thrown from his gig. The surgeon who attended him seems to have put the limb into a very good position, and everything appeared to go on

well, till, upon removing the splints, it was found that union had not taken place; and as his constitution had suffered, partly from the necessary confinement, and, perhaps, partly from the want of proper stimulants, consequent upon his teetotal practice, his surgeon ordered him a more generous diet, and removal to the coast, but still no improvement took place.

As I had been his medical attendant when he formerly resided in this neighbourhood, he came over and put himself under my care, just fourteen weeks after the accident. Upon examination, I found a transverse ununited fracture of the lower-third of both tibia and fibula; there was no formation of callus, and the fractured ends of the bones were quite moveable, but could be readily adapted to each other; neither was there any inflammatory action about the parts, although having been advised to rub the two ends of the bones together, he had very assiduously followed that advice. Mr. Guthrie had seen the case a few days before, and recommended Amesbury's splints, a modification of which I at once determined to try, in connection with the application of electro-magnetism, which I had a good opportunity of doing, as my pupil was at that time making some experiments with a small apparatus. I therefore had a kind of *boot* made for him, of turned sheet iron, which, when applied, embraced the whole leg, ankle, and foot. This I had well adapted to the limb by means of padding, so as to prevent any lateral motion, an object which was the more readily accomplished, as the fracture was perfectly transverse, and that part of the *boot* which was directly over the fracture was made to turn back upon a hinge, so that I could at any time get to the injured part, without in the least disturbing the limb.

With this apparatus, firmly fixed, and assisted by a pair of crutches, he was directed to take daily exercise in the open air; to partake freely of wine, porter, and animal food; and when sitting in the house, or lying in bed, to have the fractured ends firmly pressed against each other, by means of a broad band passed over the knee, and under the foot-board, capable of being tightened by a strap and buckle, the leg being bent at the same time at a right angle with the thigh. This strap was to be removed, and the limb to be permitted to hang down and partially used when taking out-door exercise. In addition to this, for nearly half an hour every day, an electro-magnetic current was made to pass directly through the fracture, by means of needles attached to the two poles of the apparatus, their points being inserted just under the skin, one on each side of the fracture. This plan of treatment was commenced on the 9th of October, 1845; by the 22nd sufficient inflammatory action had been set up to render the further application of galvanism unnecessary; and by the 30th the deposit of callus was so copious, and the union of the fracture so firm, that at my patient's earnest solicitation I gave him permission to return to his duties, directing him still to wear his boot, and to continue the use of his crutches.

As his place of business was many miles from my residence, I did not see him again for some considerable time, but he informed me that after the first week he threw away one of his crutches; that the next week he grew tired of his boot, and threw it on one side, together with his other crutch, and went away comfortably about his business, with only a stout walking stick, which he continued to use for some time; and when I again saw him, one leg was equally as firm and sound as the other, the point of fracture being marked by a thick firm band of callus.

Under the circumstances, I think I am justified in attributing the great and sudden healthy action which was set up in this case mainly to the influence of galvanism; for while similar cases under the usual modes of treatment have, under the most favourable circumstances, required long and tedious attention, this case began to improve from the very first application of the remedy; within three weeks firm union had taken place, and in less than six weeks the cure was perfect.

The electro-magnetic apparatus that I made use of was a double coil machine, excited by two *electromotors*, on Professor Daniell's principle. I at first endeavoured to establish the current by two small metallic discs, one connected with each pole, and placed on each side of the fracture; but finding that little or no *perceptible* action was thereby produced, I substituted needles for the discs, and introduced their points in an oblique direction, just under the skin, on each side of the fracture, thereby causing the galvanic current to pass directly between the ends of the fractured bone. The moment the circuit was completed by the introduction of the second needle, the sensation was most acute, but in a minute or two the pain became bearable, and the patient was able to sit under it for from fifteen minutes (the time occupied at first,) to a good half-hour, to which I extended it the last three or four times.

SINGULAR CASE OF CUTANEOUS DISEASE.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Perhaps you will do me the favour to insert in the Journal the following particulars of a case of a very singular and fatal disease.

I am, Sir, yours &c.,

JOHN BARCLAY, M.D.

Leicester, October 26, 1847.

Sarah Anne Moss, aged two years and three months, a very intelligent child, of poor parents, was first brought to me on the 27th of last September, in a state of extreme emaciation, suffering from profuse diarrhœa, the stools occasionally containing blood and pus, with eczema, and to a distressing extent. I prescribed warm baths; the Decoctum Cetrariæ, *ad libitum*; small doses of Hydrarg. cum Creta, and Pulv. Cretæ Comp., night and morning; with a diet of strong animal broths and jellies.

On the 5th of October, the eczema was much less intense, the diarrhœa continuing. I now prescribed

quinine and sulphuric acid, with tincture of kino, and a drop of laudanum three times a day; and sinapisms to the abdomen, with the same diet, &c.

On the 8th, the child was decidedly better, and had become so cross as hardly to suffer me to enter the house. The stools were much more natural, and fewer in number; while the eczema ani had quite disappeared.

On the 14th and 17th, I found her steadily improving, with a good appetite, and healthy evacuations.

On the 19th, she appeared to droop a little, having been doing well till then, contrary to the expectations of her parents.

On the 20th, I found her worse, and was informed that on the afternoon of the previous day, a small red spot, about the size of a sixpence, had appeared under her chin, and had rapidly spread until it assumed the formidable appearance it now presented. There was no swelling nor hardness, the redness being well-defined, and terminating abruptly in the healthy skin. It was quite continuous, and extended over the fore part of the neck, the chin, and the lower part of both cheeks. The cuticle was entirely separated from the cutis, and the serum distended it at the dependent portions. When the cuticle was removed there was a copious clear discharge from a red and angry surface. It looked precisely as if a kettle of boiling water had been poured over it, or a large blister had been applied to the part. The child lay on her back, dreading motion, with the extremities cold, and would take nothing but milk, which I allowed plentifully, and directed finely-powered starch to be dusted on the neck.

On the 21st, I found matters worse, the disease spreading over the neck, and continuing to present the same appearances. There was a red spot on the nose, and also on one of her fingers; the stools had again become unnatural and slimy. I directed a little port wine to be given, and as much milk as she chose to drink.

On the 22nd, it had spread all over the upper part of the back, and over the left scapula, where there were a few blackish spots like gangrene, and the stench was very unpleasant. The redness appeared to extend in the first instance, serum being then uniformly and rapidly effused under the cuticle. There was no heat nor swelling of the affected parts; the bowels were more natural.

She continued perfectly conscious to the last, and her death on the 23rd was hailed by her parents as a deliverance from suffering. The emaciation was extreme, and the body looked exactly as if the child had been dipped in scalding water, the cuticle being entirely separated from the nape of the neck to the nates. The appearances and smell which I had thought to indicate gangrene, were, contrary to my expectations, gone.

I felt extremely at a loss what diagnosis to make of this disease. To erysipelas it bore no resemblance, particularly in that the entire part affected continued discharging serum to the last. And I may add, that two practitioners, of extensive experience, to whom I showed the case, were equally unable to assist me in forming an opinion.

DISCOVERY OF A NEW ANÆSTHETIC AGENT MORE EFFICIENT THAN SULPHURIC ÆTHER.

By J. Y. Simpson, M.D., Professor of Midwifery in the University of Edinburgh, Physician Accoucheur to Her Majesty in Scotland, &c.

At the first Winter Meeting of the Medico-Chirurgical Society of Edinburgh, held on the 10th of November last, I had an opportunity of directing the attention of the members to a new agent which I had been using for some time previously, for the purpose of producing insensibility to pain in surgical and obstetric practice.

This new anæsthetic agent is chloroform, chloroformyle, or perchloride of formyle.* Its composition is expressed by the chemical formula, $C_2H\,Cl_3$. It can be procured by various processes, as by making milk of lime or an aqueous solution of caustic alkali act upon chloral; by distilling alcohol, pyroxylic spirit, or acetone with chloride of lime; by leading a stream of chlorine gas into a solution of caustic potass in spirit of wine, &c. The resulting chloroform obtained by these processes is a heavy, clear, transparent liquid, with a specific gravity as high as 1.480. It is not inflammable. It evaporates readily and boils at 141°. It possesses an agreeable, fragrant, fruit-like odour, and a sacharine pleasant taste.

As an inhaled anæsthetic agent it possesses, I believe, all the advantages of sulphuric æther, without its principal disadvantages:—

1. A greatly less quantity of chloroform than of æther is requisite to produce the anæsthetic effect; usually from a hundred to a hundred and twenty drops of chloroform only, being sufficient, and with some patients much less. I have seen a strong person rendered completely insensible by six or seven inspirations of thirty drops only of the liquid.

2. Its action is much more rapid and complete, and generally more persistent. I have almost always seen from ten to twenty inspirations suffice; sometimes fewer. Hence the time of the surgeon is saved; and that preliminary stage of excitement, which pertains to all narcotizing agents, being curtailed or indeed practically abolished, the patient has not the same degree of tendency to exhilaration and talking.

3. Most of those who know from previous experience the sensations produced by æther-inhalation, and who have subsequently breathed the chloroform, have strongly declared the inhalation and influence of

* In making a variety of experiments upon the inhalation of different volatile chemical liquids, I have, in addition to perchloride of formyle, breathed chloride of hydrocarbon, acetone, nitrate of oxide of ethyle, benzin, the vapour of idoform, &c. I may probably take another opportunity of describing the results. It is perhaps worthy of remark, that in performing his experiments upon inhalation, Sir Humphrey Davy confined his attention to the inspiration of gasses, and does not seem to have breathed the vapour of any volatile liquids.

chloroform to be far more agreeable and pleasant than those of æther.

4. I believe that, considering the small quantity requisite, as compared with æther, the use of chloroform will be less expensive than that of æther, more especially as there is every prospect that the means of forming it may be simplified and cheapened.

5. Its perfume is not unpleasant, but the reverse; and the odour of it does not remain for any length of time obstinately attached to the clothes of the attendant, or exhaling in a disagreeable form from the lungs of the patient, as so generally happens with sulphuric æther.

6. Being required in much less quantity, it is much more portable and transmissible than sulphuric æther.

7. No special kind of inhaler or instrument is necessary for its exhibition. A little of the liquid diffused upon the interior of a hollow-shaped sponge, or a pocket handkerchief, or a piece of linen or paper, and held over the mouth and nostrils, so as to be fully inhaled, generally suffices in about a minute or two to produce the desired effect.

I have had an opportunity of exhibiting chloroform with perfect success in various severe surgical operations, (removal of tumours, of necrosed bone, amputations, &c., &c.,) and in tooth-drawing,* opening abscesses, &c., &c.; for annnulling the pain of dysmenorrhœa and of neuralgia; in two or three cases where I was using deep and otherwise very painful galvano-puncture for the treatment of ovarian dropsy; and in removing a very large fibrous tumour from the posterior wall of the uterus by enucleation, &c.†

I have employed it also in obstetric practice with entire success. The lady to whom it was first exhibited during parturition, had been previously delivered in the country by perforation of the head of the infant, after a labour of three days' duration. In this, her second confinement, pains supervened a fortnight before the full time. Three hours and a half after they commenced, and ere the dilatation of the os uteri was completed, I placed her under the influence of the chloroform, by moistening, with half a teaspoonful of the liquid, a pocket-handkerchief, rolled up into a funnel-shape, and with the broad or open end of the funnel placed over her mouth and nostrils. In consequence of the evaporation of the fluid, it was once more renewed in about ten or twelve minutes. The child was expelled in about twenty-five minutes after the inhalation was begun; the mother subsequently remained longer soporose than commonly happens after æther. The squalling of the child did not, as usual, rouse her, and some minutes elapsed after the placenta was expelled, and after the child was removed by the nurse into another room, before the patient awoke. She then turned round and observed to me that she had "enjoyed a very comfortable sleep, and indeed required it, as she was so tired,‡ but would now be more able for the work before her." I evaded entering into conversation with her, believing, as I do, that the most complete possible quietude forms one of the principal secrets for the successful employment of either æther or chloroform. In a little time she again remarked that she was afraid her "sleep had stopped the pains." Shortly afterwards her infant was brought in by the nurse from the adjoining room, and it was a matter of no small difficulty to convince the astonished mother that the labour was entirely over, and that the child presented to her was really her "own living baby."

Perhaps I may be excused from adding, that since publishing on the subject of æther-inhalation in midwifery, seven or eight months ago,§ and then for the first time directing the attention of the medical profession to its great use and importance in natural and morbid parturition, I have employed it, with few and rare exceptions, in every case of labour that I have attended, and with the most delightful results, and I have no doubt whatever that some years hence the practice will be general. Obstetricians may oppose it, but I believe our patients themselves will force the use of it upon the profession.‖ I have never had the pleasure of watching over a series of better and more rapid recoveries, nor once witnessed any disagreeable result follow to either mother or child, whilst I have now seen an immense amount of maternal pain and agony saved by its employment; and I most conscientiously believe, that the proud mission of the physician is distinctly twofold—namely, to alleviate human suffering, as well as preserve human life.

* A young dentist, who has himself had two teeth extracted lately, one under the influence of æther, and the other under the influence of chloroform, writes me the following statement of the results:—About six months ago I had an upper molar tooth extracted whilst under the influence of æther, by Mr. Imlach. The inhalation was continued for several minutes before I presented the usual appearance of complete ætherization. The tooth was then extracted; and although I did not feel the least pain, yet I was conscious of the operation being performed, and was quite aware when the crash took place. Some days ago I required another molar extracted on account of tooth-ache, and this operation was again performed by the same gentleman. I inhaled the vapour of chloroform, half a drachm being poured upon a handkerchief for that purpose, and held to my nose and mouth. Insensibility took place in a few seconds; but I was so completely *dead* this time, that I was not in the very slightest degree aware of anything that took place; the subsequent stupifying effects of the chloroform went off more rapidly than those of the æther; and I was perfectly well and able again for my work in a few minutes."

† I have now exhibited the chloroform to a large number of individuals, and in not one has the slightest bad effect of any kind resulted.

‡ In consequence of extreme anxiety at the unfortunate result of her previous confinement, she had slept little or none for one or two nights preceding the commencement of her present accouchement.

§ See "Monthly Journal of Medical Science," for Febr., p. 639; for March, p. 718, and 721, &c.

‖ I am told that the London physicians, with two or three exceptions only, have never yet employed æther-inhalation in midwifery practice. Three weeks ago I was informed in a letter from Professor Montgomery, of Dublin, that he believed that in that city, up to that date, it had not been used in a single case of labour.

In some remarks which I published in the *Monthly Journal of Medical Science*, for September, 1847, relative to the conditions for insuring successful ætherization in surgery, I took occasion to insist upon the three following leading points:—"*First*, the patient ought to be left, as far as possible, in a state of absolute quietude and freedom from mental excitement, both during the induction of ætherization and during his recovery from it. All talking and all questioning should be strictly prohibited. In this way any tendency to excitement is eschewed, and the proper effect of the æther-inhalation more speedily and certainly induced. *Secondly*, with the same view, the primary stage of exhilaration should be entirely avoided, or at least reduced to the shortest possible limit, by impregnating the respired air as fully with the æther-vapour as the patient can bear, and by allowing it to pass into the lungs both by the mouth and nostrils, so as rapidly and at once to induce its complete and anæsthetic effect, * * * a very common but certainly a very unpardonable error being to exhibit an imperfect and exciting, instead of a perfect and narcotizing, dose of the vapour. Many of the alleged failures and misadventures are doubtless entirely attributable to the neglect of this simple rule,—not the principle of ætherization, but the mode of putting it in practice being altogether to blame. But, *thirdly*, whatever means or mode of ætherization is adopted, the most important of the conditions required for procuring a satisfactory and successful result from its employment in surgery, consists in obstinately determining to avoid the commencement of the operation itself, and never venturing to apply the knife until the patient is under the full influence of the æther-vapour, and *thoroughly and indubitably soporized* by it."

In fulfilling all these indications, the employment of chloroform evidently offers great and decided advantages in rapidity, facility, and efficiency over the employment of æther. When used for surgical purposes, I would advise it to be given upon a handkerchief, gathered up into a cup-like form in the hand of the exhibitor, and the open end of the cup placed over the nose and mouth of the patient; for the first inspiration or two it should be held at the distance of half an inch or so from the face, and then more and more closely applied to it. To ensure a full and perfect anæsthetic effect,—more especially when the operation is to be severe,—a teaspoonful or two of the chloroform should at once be placed upon the hollow of the handkerchief, and immediately held to the face of the patient. Generally a state of snoring sleep very speedily supervenes, and when it does so, it is a perfect test of the superinduction of complete insensibility. But many patients are perfectly anæsthetic without this symptom.

As illustrations of the influence of this new anæsthetic agent, I will select and append notes of two operations performed with it on Friday last by Professor Miller, the first in the Royal Infirmary,* the other in private practice. The notes and remarks are in Mr. Miller's own words.

Case I.

"A boy, four or five years old, with necrosis of one of the bones of the fore-arm. Could speak nothing but Gaelic. No means, consequently, of explaining to him what he was required to do. On holding a handkerchief, on which some chloroform had been sprinkled, to his face, he became frightened, and wrestled to be away. He was held gently, however, by Dr. Simpson, and obliged to inhale. After a few inspirations he ceased to cry or move, and fell into a sound snoring sleep. A deep incision was now made down to the diseased bone; and, by the use of the forceps, nearly the whole of the radius, in the state of sequestrum, was extracted. During this operation, and the subsequent examination of the wound by the finger, not the slightest evidence of the suffering of pain was given. He still slept on soundly, and was carried back to his ward in that state. Half an hour afterwards he was found in bed, like a child newly awakened from a refreshing sleep, with a clear merry eye, and placid expression of countenance, wholly unlike what is found to obtain after ordinary etherization. On being questioned by a Gaelic interpreter, (who was found among the students,) he stated that he had never felt any pain, and that he felt none now. On being shown his wounded arm, he looked much surprised, but neither cried nor otherwise expressed the slightest alarm."

Case II.

"A young lady wished to have a tumour (encysted,) dissected out from beneath the angle of the jaw. The chloroform was used in small quantity, sprinkled upon a common operation sponge. In considerably less than a minute she was sound asleep, sitting easily in a chair, with her eyes shut, and with her ordinary expression of countenance. The tumour was extirpated, and a stitch inserted, without any pain having been either shown or felt. Her sensations, throughout, as she subsequently stated, had been of the most pleasing nature; and her manageableness during the operation was as perfect as if she had been a wax doll or a lay figure.

"No sickness, vomiting, headache, salivation, uneasiness of chest, in either of the cases. Once or twice a tickling cough took place in the first breathings."

My assistant, Dr. Duncan, who exhibited the chloroform to this last patient, informs me that about a drachm of the liquid was used.

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* Professor Dumas, of Paris, Mr. Milne Edwards, Dr. Christison, Sir George Ballingall, and a large collection of professional gentlemen and students witnessed this operation, and two others performed with similar success, by Professor Miller and Dr. Duncan.

Edinburgh, November 15, 1847.

CASES FROM PRIVATE PRACTICE.

By JOHN RICHARD WARDELL, M.D., Edin.;

Late President of the Royal Physical and Hunterian Medical Societies, Assistant Pathologist in the Royal Infirmary, Edinburgh, &c. &c.

(*Continued from page* 629.)

CASE IV.

POISONING BY LAUDANUM.

Ann H———, aged 19, maid-servant at an inn, of sanguino-phlegmatic temperament, muscular system well developed, healthy-looking before the attack.

This morning, November 6th, 1845, I was quickly summoned, it being reported that she had fallen down in a fit. On arrival I found her laid in a helpless and prostrate condition; countenance looked sunken and congested; pupils dilated, and one (the right,) of greater diameter than the other; had vomited about the room, and the ejected matter seemed to be more than half a pint, and emitted a strong spirituous odour; no bowel complaint, but sickness was persistent during the first half hour, after which she sank into an alarming collapse; pulse 60, of tolerable volume, felt labouring and oppressed to the touch. The inmates of the house being interrogated, it was reported that she had during the previous part of her servitude (several months,) always manifested cheerful or rather buoyant spirits. No particular quarrel or disagreement had taken place between herself and mistress, nor with any other individual, as far as could be ascertained. Her fellow-servant stated that she had that morning prosecuted her wonted avocations in the ordinary manner, nor did she perceive anything unusual either in her appearance or vivacity. At half-past eight o'clock her mistress ordered her to clean out one of the rooms, to which employment she repaired with her accustomed alacrity. Not more than from ten to fifteen minutes after this she was found helplessly reclining in an arm-chair, being quite unconscious of her situation, and was carried into another apartment, in which I first saw her. At first it might have been considered a fit, from the sudden manner in which her illness supervened, but it was pretty evident, on a general and deliberate view of the case, there were far greater reasons for concluding that poison had been taken. Mr. Cole regarded the case as such, and in his opinion I fully acquiesced. The stomach-pump, without loss of time, was introduced, and the organ washed out two or three times with warm water. She was now carried (being quite powerless,) to a warmed bed, hot bottles were applied to the feet, fomentations to the epigastrium, sinapisms to the legs and along the region of the spine; other parts of the body were vigorously rubbed with hot flannels, ammonia was applied to the nostrils; flagellation, shaking incessantly, &c., were also had recourse to, indeed she was never allowed for a moment to rest quietly. For some time her case seemed very doubtful, the prostration was so great.

At this time another opinion was obtained from a physician of considerable information, but this gentleman pronounced her to be in a state of deep intoxication, and conceived that if left alone she would ultimately recover her lost senses,—that was, when the effects of the drink had subsided.

Opposing this opinion, and being borne out in it by Mr. Cole, the described remedial measures were energetically continued,—that is, she was treated for narcotism, though no further light had yet been thrown upon the case. After some time a low and indistinct muttering was at intervals elicited, and in half an hour from this her cries began to be stronger and louder, when she began to struggle, and gave evidence of experiencing pain from the mustard plasters. In the course of another hour she partially opened her eyes, and in no long time at intervals called out for her mother. Soon afterwards she manifestly became conscious of her situation, and although she remained lethargic and dull when not interrogated and left alone, yet upon questions being put she answered rationally. The rubbing and agitation was yet persevered in.

As she gradually regained her intelligence, it was repeatedly asked what she had taken, yet such enquiries could elicit no other reply than the monosyllable—RUM, and she persistingly denied having taken any description of poison. From the general appearance of the case, and a deep conviction of the want of truth in this statement, I determined not to cease in my questions until she made a true confession. At length she said she had swallowed laudanum, with an intent to destroy herself. More vigorous enquiries gave the information as to where the bottle had been deposited. From the accounts of herself, as well as the statements of others, it was ascertained that two or three days previously her mistress had procured half an ounce of the tincture of opium for the tooth-ache, of which not more than a few drops had been used to moisten a piece of lint. The vial—a four-drachm one—was, as the girl told us, placed in a tumbler glass, on a shelf in the *bar* over the spirit kegs, which on being produced shewed that only a portion of its contents (not half, certainly,—say a hundred drops,) had disappeared since the previous evening, at which time the mistress saw the bottle full. The patient stated that on seeing the vial she took it, and mixed a portion of the poison into a wine-glassful of *dry* rum, which she quickly swallowed, and then in a few minutes became unconscious. The only reason which she assigned for having committed this rash act, was her mistress having said that after Martinmas, (the period at which servants are hired in this part of the country,) she should act as under-servant to the other maid with whom she had hitherto been placed on equality. There were no circumstances inferring that she was pregnant, and her character was that of being a strictly virtuous girl. It was subsequently ascertained, that on one or two occasions not long before, she told one of her acquaintances that she had an impression "she should die soon," although, as above remarked, she was not, nor had been, of melancholy mood. After having fully come to herself, some bland liquids and the following mixture were ordered:—

R. Sp. Ammon. Co., dr. ij; Mist. Camph., oz. viij. Sit mist. Capt., oz j., quarta quaque hora.

Vespere.—Is much better, and is capable of being

removed to her own home, two miles distant in the country.

7th. This morning is dull and somewhat desponding, as she maintains a sullen taciturnity; bowels open; tongue clean; pulse natural.

8th. To-day has regained her wonted spirits; never alludes to her indisposition, and is in every respect as usual.

After this she entered upon another situation, and since that period has enjoyed good health, and been in every respect well.

REMARKS.

It is not without being fully aware that of all descriptions of poisoning, that by opium and its preparations is in these kingdoms by far the most common, and when it is remembered that innumerable cases occur which do not go on to a fatal termination, and therefore are unknown to all save the few individuals amongst whom they happen, the total number of instances of poisoning by this drug annually must be very considerable. In the years 1837 and 1838, no less than 198 persons were killed by it in England and Wales alone,* being nearly two-thirds of the fatal cases resulting from all kinds of poisoning, it therefore must needs be far too common to present anything of novelty to the reader, if merely regarded as an ordinary instance of the kind; but as I humbly opine there are certain considerations of more than usual interest associated with the example now given, it has on such account been forwarded to these columns. In those instances which are connected with medico-legal enquiries, all such cases as appear exceptional examples to general rules are particularly eligible for being recorded; an accumulation of such data as might from time to time be collected, would thus necessarily be of very eminent service in tending to the correct determination of judicial questions, and might occasionally lead to the detection and punishment of crime, or remove an imputation from the innocent.

When summoned to a case manifesting the symptoms of narcotic poisoning, there are not unfrequently perplexing appearances and even the best informed of our profession have at times erred, in arriving at a wrong diagnosis, because such an instance might simulate other diseases, and other diseases liken this affection. An error of this kind is most likely to occur where there is no clue to conduct the practitioner into a right way of viewing the case beneath his notice. A correct detail of such particulars as might be elucidated from those who were acquainted with the previous history of the patient, together with all the collateral information which could be gained at the moment, ought to receive the most scrupulous attention; and will be found of paramount importance in assisting us in arriving at the proper conclusion.

On a perusal of the above case, however, it will be observed, that there was very little or no aid to be derived from the depositions of others, as there were no circumstances leading to the supposition that the patient had herself committed the rash act. No fault had been found with regard to her previous conduct; no vessel was discoverable that contained any deleterious matters; indeed no conclusion whatever could then be come to as explicable of the matter. Mr. Cole, in whose practice the case occurred, first saw the patient, and he very correctly deemed it a case of poisoning, and not a fit, as many of the surrounding people, (not without somewhat plausible reasons, owing to the suddeness of the attack, which certainly gave some colouring to such supposition,) considered it to be. By the comatose symptoms supervening with so much celerity, apoplexy was not a little resembled; and as regards the sickness, we know that vomiting very often occurs during the apoplectic seizure. But apoplexy is more liable to come on in those advanced in life, and, notwithstanding there have been girls at this age who have died of apoplexy, yet such cases are of very rare occurrence—the mere exceptions to a general rule. There is not much risk of mistake with epilepsy; in the epileptic paroxysm there arises much more tonic convulsive agitation of the limbs; there is foaming at the mouth, a rigidity instead of flaccidity of the muscles, the convulsions cease, and during the intermissions the lividity of the countenance, etc., disappear, until the return of another paroxysm. Now, under the influence of narcotic poisoning the facial congestion does not alternately go and return; poisoning by opium, however, has been regarded and treated as epilepsy, but the mistake is much more liable to be made where prussic acid has been the noxious agent employed.

The states then which may be mistaken for this kind of poisoning are apoplexy, deep drunkenness, and sometimes (though this has seldom been the case,) epilepsy.

It is reported that a strong spirituous odour was emitted from the ejected matters; was it then deep intoxication? An extreme degree of drunkenness has been treated as poisoning, and conversely, cases of poisoning regarded merely as drunkenness. In this example it was very conclusive that rum had been drunk, but in what quantity was then unknown, and from being thus satisfied that spirit had been taken, such fact was not a little likely to mislead and allure the practitioner from the real cause of the affection. The physician who was called in, as mentioned in the case, arrived at the conclusion that it was powerful inebriety, chiefly from the consideration of the indubitable evidence that liquor had been taken. Now, if it had been drunkenness, this state of helpless prostration could not possibly have come on so soon as in from ten to fifteen minutes, and that it did supervene thus rapidly there was unquestionable proof, because in no longer time previously she had been seen prosecuting her usual duties. Again having

* Parliamentary Reports.

vomited so freely, as manifested by the ejections scattered over the floor, one might have supposed that the whole or most of the spirit would have been expelled from the stomach; besides the lividity of the countenance, the declension of temperature, and other symptoms, presented more the features of poisoning than drunkenness. "Intoxication," says Mr. Taylor in his excellent work, "has been considered to retard the operation of opium. Observations of this kind must of course be accidental, and there is scarcely a sufficient number of cases reported of narcotic poisoning under these circumstances to justify a decided opinion on the point. It was observed of a person who had swallowed a strong dose of opium while partially intoxicated, that the symptoms were some hours before they were manifested. Perhaps, strictly speaking, the symptoms in these cases are masked."*

The retardation of the operation of the drug by being taken with intoxicating liquors will evidently depend upon the QUANTITY of the latter which may be drunk; if only a small portion, why it is fair to infer that such would act as a stimulant, and consequently counteract the effects of the poison; but when much liquor has been simultaneously swallowed, instead of acting as a stimulant, it would rather prove a sedative, and thus favour more than oppose the effects produced by the poison, because we know that all descriptions of stimulants only stimulate to a certain degree, and beyond this point they become sedatives. Moderate cold stimulates; when excessive it is a sedative, producing sleep, coma, or death. Stimulants are those agents which operate by accelerating the actions of a living part, which are chiefly manifest by heightening the circulatory function. Now, when such agents are particularly applied to the vital organs, properly so called, the vascular functions of those organs are first considerably increased, and precisely commensurate with this anormal increase of action, follows a declension of power; and thus we see that this sequel must depend upon the power of the first cause. Increase of action, therefore can only be rendered excessive to a certain point, after which it declines, and the effects, as already said, are proportional to the extent of the agent or agents which thus operate upon our frames.

In the instance of this girl, only from one to two wineglassfuls of neat rum had been taken, and in the sickness a great portion must have been vomited; it is therefore fair to conclude that the spirit could not have had considerable effect in the induction of any particular results, and certainly there is reason to believe that the liquor would, according to the views now given, tend to avert more than accelerate the hypnotic qualities of the poison, because the portion retained must have rather stimulated than otherwise. It is of paramount importance, then, in all cases where spirit has been swallowed along with a narcotic poison, to know, if possible, the quantity of liquor drunk, because with the possession of such information our fears might be in some degree allayed, or we might then become more accurately aware of the real extent of the danger.

(To be continued.)

* Taylor's "Manual of Medical Jurisprudence," page 23.

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, DECEMBER 1, 1847.

THE ATTENTION OF EVERY MEMBER OF THE PROVINCIAL ASSOCIATION IS EARNESTLY REQUESTED TO THE FOLLOWING PROPOSITION:—In our leading article for the number of the Journal issued on the 24th of March in the present year, *on the results of medical treatment*, reference was made to a plan suggested by Mr. Hunt, of Herne Bay, for the improvement of medical science; and notice was given that "a series of questions would shortly be addressed to each member, touching his professional experience on various practical subjects."

The first subject selected for these enquiries, is *the Medicinal Action of Arsenic*, a powerful and active mineral, concerning the effects of which the profession appears to be much divided in opinion. There is reason to believe that certain formidable diseases which will yield to no other remedy, may be destroyed by arsenic carefully administered. It is known, however, that many practitioners, conceiving it to be a dangerous remedy, from motives of caution abstain altogether from its use, and that others administer it sparingly and timidly, partly from an imperfect acquaintance with its action on the human system, and partly from doubts of the propriety of having recourse freely to the use of a rank poison, the effects of which have become a question of controversy. With a view to collect all the information which the experience of practical men can furnish, in order that by comparing and arranging the facts so collected, the controverted points may be examined, and if possible, satisfactorily explained and adjusted, each member of the Association is particularly requested to furnish replies to the following series of questions. It will be noticed that they relate only to the *facts* which have attracted the observation of the members,—not to the inferences which they may respectively have drawn from these facts, and it is earnestly hoped that no member will refuse prompt compliance with a request which it will be perceived is addressed to each one by the special sanction of the Council.

The object of the questions is to obtain the

results of the experience of practical men who are not accustomed to publish their cases: but it is not intended to stop here. So soon as all the members have responded, the facts will be arranged statistically, and then compared with all the authentic records of the same description which can be gathered from treatises or articles already printed,—the whole to form the subject of an essay which will ultimately appear in one of the Society's publications, and which it is hoped cannot fail to be in some degree instructive to the profession. It is respectfully submitted that greater certainty will be obtained if members carefully abstain from all statements which are not either to be found in their note books, or *distinctly* imprinted on their memories.

QUESTIONS.

1. In how many cases have you had an opportunity of watching the internal administration of arsenic in medicinal doses?

2. Did you ever see a case in which arsenic so administered, proved fatal; and if so, what are the proofs that the death of the patient was caused by arsenic; and what dose was administered and how often?

3. Have you any proofs, that under your own observation, arsenic has ever, in medicinal doses proved seriously or permanently detrimental to the health? If so, state the symptoms, and mention the facts which prove that arsenic was the injurious agent.

4. Did you ever see it administered without producing any apparent effect on the system, and if so, in what dose, and how long was it persisted in?

5. In what disease or diseases have you seen arsenic useful, and to what extent? What proofs can you give of its efficiency?

6. Irrespective of its therapeutic efficacy, what effects have you observed to result from the medicinal use of arsenic? And what proofs can you adduce that these effects were real—not imaginary?

7. Is there any one symptom (or more) which you have found *invariably* resulting from its exhibition; and what symptom or symptoms?

8. Have you noticed much variableness in its action in different cases, or the contrary? Have you observed its effects modified by age, sex, or idiosyncrasy; and to what extent?

9. State generally the *conditions* which have guided you in the administration of arsenic; what you have regarded as the sign or signs of an overdose; and what the circumstances are, which in your experience have seemed to contra-indicate its use.

10. State particularly what preparation you have used; what doses; whether administered on a full stomach or fasting; whether in increasing, decreasing, or uniform doses; whether alone, or in combination; whether in hospital or private practice.

11. What proof can you offer that the preparation you have used was pure?

12. Have you used arsenic externally? In how many cases, and in what diseases; and with what effect, local and constitutional?

13. Can you refer to any valuable papers or treatises on the medicinal use of arsenic, which may assist in the prosecution of this enquiry?

14. Can you mention any facts of interest occurring under your own eye, connected with the subject, not referred to in these questions?

To prevent the trouble of unnecessary repetition, it is proposed that the answers be returned according to the order of the questions,—thus; for example—

Question 1.——*Answer*, "In 50 cases," (more or less.)
Question 2.——*Answer*, "Never; or three times, viz.", &c., (as the case may be.)
Question 3.——*Answer*, "No proofs, or, in one instance, permanent ————," (as the case may be.)
Question 4.——*Answer*, "Never;" (as the case may be.)
Question 5.——*Answer*, "In 10 cases of intermittent fever, in 20 cases of cutaneous disease, in 10 of neuralgia, &c., &c., concisely *enumerating* the cases, and citing the *proofs* of its efficacy.

Those proofs will be deemed most satisfactory, of course, in which the medicine has been exhibited alone uncombined; and those especially in which, by intermitting the medicine for a time, the disease having been checked, has been observed to return, and has again and again been checked by resuming the medicine.

It is likewise requested that the answers may be returned, as far as possible, *numerically*, (not in general terms,) so that they may be arranged, collated, and compared in a tabular form.

It is hoped that every member will return his answers to the questions here proposed, on or before the 1st of January, 1848, addressed to Thomas Hunt, Esq., Surgeon, Herne Bay, Kent, who is appointed by the Council to receive them.

(Signed)

JAMES HEYGATE,
President of the Association.

CHARLES HASTINGS,
President of the Council.

Review.

Cold and Consumption; or Consumption, its Prevention and Cure, by Cold, as a Constitutional, and Inhalation, as a Local Agent, &c. &c.. By HENRY C. DESHON, Member of the Royal Colleges of Physicians and Surgeons of London, &c. London: 1847. 8vo. pp. 153.

When we meet with a book written by a member of our profession upon the nature, prevention, and cure of a specific disease, and dedicated, as a mark of peculiar respect, to a gentleman who occupies an eminent position in our ranks, we are undoubtedly entitled to assume that it is a volume expressly intented for the benefit and instruction of *ourselves*.

Whether, under any circumstances, it be desirable that works upon special maladies should be compiled merely for the amusement and information of the non-professional public, is a point upon which there *may* be a difference of opinion, although we have almost invariably found the question answered in the *negative*, and, as we think, with the utmost propriety and justice, because we conscientiously object to every method of popular advertising. If, however, any one of our brethren be willing to risk the undertaking, and does, notwithstanding the established rule, collect from various sources certain medical statements, and presents those statements in familiar language to the world at large, we think that he is bound to specify distinctly at the commencement of his work, the nature of his design, and that he ought not to prefix a dedication calculated to convey a totally erroneous impression. We also think that it becomes him to be especially careful as to the strict accuracy of all that he expresses, and particularly with regard to the superiority of his own knowledge and treatment of disease, as compared with the knowledge and treatment possessed and adopted by members of the profession generally.

The work of Dr. Deshon, entitled "Cold and Consumption, or Consumption, its Prevention and Cure," must, we will charitably hope, have been exclusively intended for the *public*. It does not contain a single medical *truth* with which every one who has diligently attended one course of lectures upon Physiology, and one course of lectures upon the Practice of Medicine, is not perfectly familiar. We do find, however, some statements with which we were *not* previously conversant, and which we cannot without due investigation add to our catalogue of *truths*. For example, at page 63 we are told that "an *affection* of the larynx, absurdly named phthisis laryngea, is *sometimes* present during the course of this disease; it is *generally sympathetic*, and of short duration, though sometimes idiopathic, caused by inflammation of the mucous and submucous structure of that organ." We would refer Dr. Deshon to the following quotations. The first is from Dr. C. J. B. Williams:—"The *serious disease* which commonly goes by the name of *chronic laryngitis*, or *phthisis largngea*, like the acute disease, reaches to the submucous cellular tissue, from whence it may extend to the other constituents of the larynx, and involve them in the intractable and destructive effects which inflammation induces in their less vital textures. Pulmonary tubercle is *very commonly* conjoined with laryngeal disease, and the two affections are apt to disguise each other." The second quotation is from Dr. Watson's lectures. "The mucous membrane of the larynx and trachea ulcerate; and when the morbid condition of the larynx gives rise to prominent symptoms, the disease is sometimes called *laryngeal phthisis*. But there is no such disease, that I know of, existing by itself. I mean, that *scrofulous ulceration* of the larynx and trachea occurs only when the lungs are affected with tubercles. Louis observed in those who perished of consumption, that as many as *one in every five* had *ulceration* of the epiglottis and larynx, and nearly *one in three* had ulceration of the wind-pipe." So much for the "*sympathetic* affection, absurdly named phthisis laryngea, *sometimes* present during the course of phthisis pulmonalis!"

Again, at page 148, Dr. Deshon relates a case which "proves," according to his ideas, "the curability of phthisis pulmonalis upon sound medicinal and physiological principles." It is only necessary to mention particularly the symptoms connected with the lungs. They were these—"Cough, dulness on percussion, coarse bronchial respiration, with mucous rales." His "impression was that *congestion* at least, highly favouring deposit, was present in the lungs, and that unless opposed by judicious means universal invasion would ensue." The patient was cured by embrocations applied to the chest, and by a generous diet, sea-bathing, riding, and the usual remedies in such cases. There was abdominal pain, also diarrhœa, which were obviated by "cretaceous mixture with opium." "Hydrocyanic acid, &c., afterwards subdued the intestinal irritability." If this be a fair specimen of the author's cases of "*cure* of *phthisis pulmonalis*," he must forgive us if we are rather sceptical as to the value and accuracy of his practical observations and deductions.

We expected to find numerous and forcible arguments proving that *cold* is an important agent in the *cure* of pulmonary phthisis. It is stated that in Russia the disease is almost unknown. Also in "Guelph, in Upper Canada, an upland district famed for its bracing air!" It is stated that "*damp* and *marshy* districts do not conduce to tubercular deposition." At page 68, it is stated that a "*damp* atmosphere must be a *warm* one,—*i. e.*, it must contain much *latent* heat"! At page 86 it is stated that a warm atmosphere is beneficial, "not on account of its augmented temperature, but by reason of its increased moisture." *Supposing* all these statements to be correct, what would be the deduction?

We are told that *cold* air antagonizes consumption, because there is no consumption in Russia. That damp marshy air also antagonizes consumption, because there is no consumption in ague districts. (!) That damp air is always warm. (!) And that the benefit of warm air is due to its moisture, and not to its temperature, (!) The simple English of which is this:—That a *cold damp* atmosphere ought to be the most favourable to the prevention and cure of *phthisis !*

We shall not pursue the analysis further. The whole book is pervaded by a spirit of which we cannot approve, and which when connected with frequent inaccuracies, and the absence of any real information, leads us to wish most sincerely, for the sake of the writer, and of the profession to which he belongs, that the desire of authorship had not in this instance been gratified.

Foreign Department.

ABSTRACT OF A MEMOIR ON INFANTILE SYPHILIS.

By M. Trousseau.

(Translated for the Provincial Medical and Surgical Journal.)

Constitutional syphilis seldom declares itself in the infant at birth, and is still more rarely seen to have commenced during intra-uterine existence. Nevertheless, some instances have been recorded of both occurrences. In the author's experience, the disease does not appear before the second week in life, which is the limit commonly assigned to it by authors. The other limit, or that at which constitutional syphilis ceases to manifest itself in the infant, is not so readily ascertained, but M. Trousseau has never seen it appear for the first time after the seventh month. Of course he alludes to secondary symptoms; tertiary symptoms in the infant, as in the adult, cannot be brought under any particular law.

Constitutional syphilis does not always begin under the same form, hence any arrangement of symptoms according to any supposed order of appearance, must be futile. Sometimes it begins as a simple erythema, at others as a more deep-seated affection of the integument. Commonly, however, the disease first appears in the mucous membrane of the nostrils. Under such circumstances, the child is in that condition which has received the popular designation of the "snuffles." It breathes with some little difficulty, and the expiration is whistling when the mouth is shut. The disease is especially evident when the child is taking the breast; it is then, in fact, that we are able to measure the difficulty of breathing, because the child cannot then breathe freely by the mouth. At first the embarrassment is not greater than in some non-specific affections, as at the commencement of measles, for instance; but this mild stage seldom lasts long, and symptoms of more significance arise, in some cases without the parents having taken any notice of the precursors. At this time a few drops of blood are seen to escape from the nostrils, either alone or mixed with mucus. The sanguineous discharge is repeated two or three times during the day. As the disease makes progress, the nasal discharge becomes more sanious, and irritating, causing ulcerations and fissures of the alæ nasi and upper lip, which are covered with a dark tenacious scab.

This specific disease must not be confounded with the numerous non specific eruptions of the same parts which assail children at the breast. The latter do not necessarily commence in the nose, but sometimes extend to it from the mouth, or attack the nose, eyes, and ears simultaneously. The true venereal affection always commences in the nostril, and generally spends its force upon that part, having a tendency to spread inwardly rather than externally. At a still more advanced stage, the bones lose their support, and the roof of the nose falls in, giving the infant a strange aspect. The breathing becomes more difficult and snuffling, and sucking is almost impossible. If the child attempts to take the breast, it is obliged to drop the nipple from a feeling of impending suffocation.

The time required for the disease to arrive at this stage is very various; sometimes a week or two is sufficient, in other cases many months are required. The mucous membrane at first appears thickened, and more or less softened, of a reddish brown colour, but without any trace of ulceration. Later, numerous small ulcers of variable depth are seen. In some cases these extend to the bones, producing caries and destruction of the vomer, the turbinated bones, and even in some instances, of the superior maxilla. In the more uncommon cases, we observe the lesions to have a scrofulous aspect; the septum narium is perforated, and the perpendicular plate of the ethmoid is converted into a semi-cartilaginous tissue. The connection of these lesions with the symptoms above enumerated is readily comprehended.

Such is the origin, progress, and consequences, of syphilitic coryza. It is one of the most constant of the constitutional manifestations of venereal disease; it gives rise to discharges, at first mucous, afterwards sanious and purulent, together with more or less bleeding from the nostrils. It ends by caries of the bones, and deformity of the features.

Another appearance in infantile syphilis, which is almost as constant, is the peculiar tint of the integuments. The disease, in fact, induces a gradual wasting of the child,—a cachectic condition, in which two periods may be distinguished. The first of these is the initiatory stage, which is essential to the disease, but which cannot be attributed to the mere length of its duration; the other is final, and generally is the near precursor of death.

From the earliest manifestations of the venereal taint, even before the health suffers, the infant has a peculiar aspect. The skin, especially that of the face, loses its transparency; it becomes sallow, without puffiness; its pink hue disappears, and is replaced by a brownish tint. This colouration is rarely absent, though it varies in degree, and in the date of its appearance. Sometimes it is general; at others it is confined to the face, or to portions of it, as the forehead

root of the nose, eye-brows, and prominent parts of the cheek; the deeper parts in the bottom of the eye generally escape. The intensity of this colour is sometimes so deep, as to resemble ephelides. The time at which it appears is not easily ascertained, since little or no reliance is to be placed upon the history afforded by the mother. It is readily dissipated under treatment.

We have given the two above phenomena with some detail, because they are of great importance; because they are the first to appear, and are, moreover, closely allied to the next, in the series of constitutional symptoms,—viz., the cutaneous eruptions.

Almost all the types of skin disease are represented in the venereal eruptions of children, as in the adult; but some are of so rare occurrence, and when present are so indeterminate as to their specific nature, that they need scarcely be mentioned. Others, however, deserve a serious attention.

After having examined a great number of cases, we do not hesitate to say that there are many forms of eruption of which it is very difficult to ascertain the venereal origin from their aspect alone; and we have frequently asked ourselves the question, whether there are any general signs by which the specific nature of an eruption can be determined? Can the same confidence be placed in the coppery tint, brown crusts, and circular forms of the eruption in the infant, as in the adult?

Although it is sometimes very manifest, the coppery hue is often far from being so; in general it may be said that in robust well-fed infants, it is little apparent; and these frequently do not present the smoky complexion which has been alluded to. Moreover, certain forms of secondary erruption are never coppery, as the mucous tubercle for instance.

The ulcerations of the mucous membranes, those of the nasal fossæ in particular, are of a colour sufficiently marked to prevent mistake, but unfortunately their characters are not ascertained until after death. The ulcers of the throat and mouth are simply red or whitish.

When scabs form on the surface of syphilitic ulcerations, they are brown or nearly black. The latter colour is probably due to admixture with blood.

The coppery tint is not equally perceptible at all periods of secondary disease. In the adult it is well known to become most distinct as the cicatrix forms, or as the erythematous patches disappear. It is not so, however, with infants; the cicatrices which succeed to all forms of eruption are reddish violet, and seldom assume the ochry hue. The livid hue is, however, in most cases, sufficiently distinctive. Such are the indefinite signs which authors have endeavoured to draw from the colour of the skin. The circular direction of the patches does not merit particular mention.

Among the cutaneous affections to which infants are subject, two demand especial notice, on account of their frequency and regularity,— these are fissures, and certain remarkable alterations of the hands and feet. These fissures are observed at the angles of the mouth, and at the anus, where they are seen to radiate as from a centre, taking the course of natural folds of the mucous membranes. The fissures are deep and wide, close to the mucous membrane, but diminish gradually from that point. They are of a vivid red colour, and their borders are tinged as it were by coagulated blood; the intervening cuticle is of a brown tint, giving the mouth a peculiar aspect. The anal fissures are usually less red and deep. The cicatrization of these fissures is slow, either on account of their specific nature, or from the movements of the lip in suction.

Fissures of the lips are almost always associated with vesicular or pustular eruptions in the immediate neighbourhood; they are later in their appearance than the coryza, coming usually simultaneously with the ochry tint of the face. These fissures are a source of great inconvenience; they give rise to great pain during the attempt to suck, so much so that some children refuse the breast altogether. The coryza adds to the severity of the symptoms by embarrassing the respiration. Under this accumulation of suffering the infant falls into a state of marasmus, the combined effects of the specific cachexia, and the inability to take sufficient nourishment.

(*To be continued.*)

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE.

LITHOTOMY AND LITHOTRITY.

In our last account of the proceedings of this assembly, we stated that the discussion on the relative merits of these operations had been revived. We proceed to lay before the readers of the *Provincial Journal* the continuation of the debate, and the arguments of the different speakers.

M. Velpeau, who commenced the discussion, declared that he had never called in question absolutely the utility of lithotrity, he only wished to ascertain the exact limits of this utility. He conceded that in the cases indicated by M. Civiale, it was less dangerous than the ordinary operation; but, nevertheless, that fact was not indisputably shewn by statistics, for in order that such should be the case, there should be means of analysing, say at least a thousand cases, similarly situated in every respect. M. Velpeau, in continuation, stated that in the examination of M. Civiale's statistics, he (M. Velpeau) had been led to quite opposite conclusions. The former, for instance, states that the relapses after lithotomy were more frequent than after lithotrity. M. Velpeau from the same figures determines the very opposite. He mentions also that M. Civiale has omitted to include in the fatal or unsuccessful cases, those in which death has followed the attempts to explore the bladder; but this he observes is not right, as it is not just to separate an operation from its natural consequences. It is not the incision of the soft parts that constitutes the danger of lithotomy, but the urinary infiltrations, and the inflammation of the bladder. In the same manner it may be said of lithotrity, that the danger does not lie in the operation itself, but in the organic state of the parts where it is performed, and in the consequences induced by it. In his recapitulation, M. Velpeau observed, that the inference in his own mind from the preceding discussion

was, that we are more ignorant of the circumstances under which lithotrity was useful, or even preferable to lithotomy; that the success of the operation has been greatly exaggerated, and under the circumstances in which lithotomy would fail, would be unsuccessful also.

M. Amussat, who followed, held the opinion that lithotomy ought never to be adopted until after the trial and failure of lithotrity, unless special conditions existed which contraindicated it,—such as a diseased state of the bladder or urethra, the latter of which is irremediable as far as to allow the introduction of instruments. After a careful attempt at breaking the stone, if it proves too hard, lithotomy must be had recourse to, but with this exception, lithotrity may be generally performed, even in cases of paralysis, or catarrh of the bladder. In conclusion, M. Amussat declares for the superior advantage of lithotrity, and considers that ætherization much simplifies the operation.

The speech of M. Segalas, which was the next in rotation, is of great length; so much so, that we can give but its salient points. The conditions which render lithotrity impossible, he says, are respectively those of the stone itself, the bladder, the urethra, and of the prostate. The *stone* may be too large, or too hard; but a plurality of calculi is no impediment. Hardness is seldom an obstacle to the operation. Some, as the phosphate of lime calculi, yield almost to simple pressure. The *bladder* can only impede the operation by its great contractility, and in this case the stone may be destroyed if it be small. Moreover, this exaggerated contraction of the viscus is usually a temporary phenomenon. A want of action in the coats of the bladder is still less of an obstacle, and is only prejudicial in requiring a more careful removal of the detritus. The existence of pouches in the bladder are a serious impediment to lithority. Inflammation and ulceration of the bladder are contra-indications, only inasmuch as the great sensibility of the bladder leads to forcible contraction of its coats. The diseases and obstructions of the *urethra* are only temporarily contra-indicatory of the operation. Diseases of the *kidneys* do not interfere with the mechanical part of the operation, and are equally an objection to lithotomy. As regards the volume of the stone, M. Segalas considers that all small and middle-sized ones (*i.e.*, not surpassing in diameter ten lines,) ought to be lithotritized; of large stones also, the phosphates may be broken down. Uric acid calculi cannot be so satisfactorily managed. The number of the calculi is, according to M. Segalas, no argument against lithotrity, provided they are not large at the same time.

M. Blandin agreed with M. Velpeau, in placing little or no confidence in M. Civiale's statistics. This surgeon had stated that lithotrity did not irritate the bladder, and that relapses were less frequent than under lithotomy. This M. Blandin refused to acknowledge.

The speech of M. Malgaigne appears to have excited much attention. He strongly insisted upon the necessity of accurate statistics, without which he stated that it would be impossible to arrive at any satisfactory conclusion. He examined first, the statistics of lithotomy, which he ascertained to exhibit a mortality of one in four. He then took the statistics of lithotrity, and shewed that M. Civiale had given much too favourable a view, for taking the consequences of exploring the bladder into account, which he maintains should be done, he declared the mortality to be one in eight, instead of one in forty-three, as stated by M. Civiale. This, however, he declared to give so much advantage to lithotrity, that he himself would not be operated upon in another manner.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES, PARIS.

M. Serres read his memoir on the treatment of fever by mercury, of which we have already given an account.

M. Gonillon exhibited a new apparatus for fracture of the clavicle, which appears to be intricate without affording any particular advantages.

M. Plouvier detailed his treatment of epilepsy, which consists in the exhibition of a combination of digitalis, belladonna, and indigo, in pills; cold baths, &c.

NOTES FROM A PRACTITIONER'S DAY BOOK.

(*Continued from page* 583.)

SYMPTOMATIC AND SPECIFIC TREATMENT COMPARED.

The practitioner that adopts an exclusive symptomatic treatment, is like the mariner, who, forgetful of his distant port, steers only to avoid the dangers which immediately beset him; whilst he who prescribes that his medicines may produce a specific effect alone, is like him who, blind to the rocks and shoals which obstruct his course, sails straight to the desired harbour. The one thinking only to clear the impediments with which he meets, sails away from his haven; whilst the other, intent only upon reaching it, is shipwrecked in his course. But as the skilful navigator, with his eye fixed upon his distant home, steers his vessel clear of the intervening impediments; so will the able prescriber, whilst he directs his remedies with a specific intent to the first cause of disease, attend also to the symptoms which it has secondarily produced.

BITARTRATE OF POTASS IN ALBUMINURIA.

In that diseased condition of the general system which has been denominated albuminuria, not only does albumen exist in the urine, but it is found in the fluid which fills the interstices of the areolar tissue, and accumulates in the cavities of the serous membranes, whilst an undue quantity exists even in the serum of the blood itself. Now, in this disease I have seen the most decided benefit follow the daily administration of cream of tartar in purgative doses; patients under this treatment have gradually become less anasarcous, and by a sufficient continuance of the remedy, the albumen has, for a time at least, ceased to appear in the urine. How can we explain this effect? The experiments of Poisseuille have proved that the purgative action of certain neutral salts depends upon their attracting to them, by endosmosis through the tissues, the serous

part of the circulating fluid, and the liquid evacuations produced by a saline purgative, are found to contain a large quantity of albumen. If, then, the albuminous fluid is carried off by the bowels, it ceases to accumulate in the areolar tissues, and the serous cavities, and is no longer excreted by the kidneys.

EXCESSIVE CUTANEOUS SENSIBILITY PRECEDING AND FOLLOWING HERPES ZOSTER.

A healthy-looking country-woman consulted me about a pain accompanied with excessive itching and smarting round one side of the back and chest. The parts were extremely tender, but presented no redness or other abnormal appearance. I tried a variety of local and constitutional treatment without any advantage. At length a rather severe eruption of herpes zoster made its appearance, and on the subsidence of this the pains ceased.

A gouty old farrier, with a broken constitution, suffered from an attack of herpes round one side of the loins and the lower part of the abdomen and groin. The eruption, though of more than ordinary severity, soon yielded to appropriate treatment, but the pain remained in a very severe degree for many months afterwards, causing great and constant suffering. He described it as a combination of the sensations of burning, tingling, itching, and smarting, and at one visit said:—"I feel at this moment as if a number of dogs were gnawing away at my side." The eruption had left some copper-coloured stains in the situation of the patches, and here and there a solitary papilla seemed somewhat enlarged, but there was no other abnormal change. All the local sedatives I used only increased his torment; a belladonna plaster and an ointment containing veratrine almost drove him mad; an essence of aconite and a solution of morphia in oil only produced an intolerable smarting. The only occasion on which I found him easy was whilst he was poisoned with belladonna. I had prescribed this remedy in small doses internally, and, deriving some benefit, he, of his own accord, took the pills more and more frequently until he was seized with giddiness and stupor, with slight delirium. He, at this time, told me he felt nothing of his pains. They, however, returned on his recovery from the symptoms of poisoning, and a recurrence to the remedy produced no amelioration. His appetite and general health were better than they had been for years before, and when once asleep, he rested well.

A young woman presented herself to me for advice about an abrasion of the skin, caused by the rubbing of her dress. She told me that three years before, she had suffered from the shingles round the right side of her abdomen and loins, and that ever since this time the parts had been affected with pains of a burning, cutting, and smarting character. They were not constant, but were excited by the slightest irritation or change of temperature. She generally suffered most when she dressed or undressed, and could never at any time bear her clothes in the least degree tight. Independently of these pains, her health was much deranged; the menstrual functions were much disordered, and the bowels torpid. These pains, however, had no resemblance to those which occur so frequently in the hysteric constitution, and they were entirely confined to the cutaneous textures.

A healthy active old gentleman, of about sixty-five, sought my advice concerning a pain round the right side of the chest. He had suffered, he told me, some months before from an eruption, and this pain had remained in the part ever since. It was described as of a smarting, burning, shooting, and itching character, and extended from the median line behind, to a point in front of the nipple before. These sensations were almost constant, and usually kept him awake for some hours at the beginning of the night; but when once asleep they rarely disturbed him, though they returned as soon as he arose in the morning. Every movement of the body or limbs increased the pain: whenever he raised his arm, he felt the movement in his side; whenever he put his right foot to the ground, it quite jarred the painful part. Moderate pressure, however, relieved his sufferings, and after lying for some time upon the painful side, it became tolerably easy, whilst at night he was always obliged to adopt this posture before he could get any sleep. As he lay talking to me on the sofa, I could observe the old gentleman pressing his side for relief against the pillow on which he was reclining. An examination of the part showed no abnormal appearance with the exception of some reddish brown stains of the skin. They resembled those which are left after herpes zoster, when the vesicles have been ruptured, and, moreover, terminated behind exactly at the median line. There was no tenderness on pressure, but the skin he said felt sore, and my manipulations greatly increased the annoying sensations. The thoracic cavity emitted no dull sound on percussion, and the respiratory murmur was everywhere distinctly audible. His health at the time of the eruption was much deranged, but now he felt as well as usual, and I could in fact find nothing to be rectified by prescription.

I directed a linimentum opii to be rubbed on the chest every night at bed-time, and as he thought, after a few days, that he had derived some benefit from the application, I advised its use also in the morning. The evening friction he considered relieved the pain, but by that in the morning it was decidedly aggravated.

Another examination deciding me in the opinion that the pain was of a nervous character, I determined upon using counter-irritation. To the right of the spinal column over a space three inches in width, and corresponding to about eight of the dorsal vertebræ, I applied the glacial acetic acid with a camel's-hair paint-brush. Finding the skin not very sensitive of the irritant I used it freely, charging the brush several successive times with the acid. Two days afterwards he was complaining a good deal of the application, but the former pains were easier, and in a week he suffered from them only in the most trifling degree, and as they continued to get better, he declined any repetition of the treatment.

C. ARNECAPLE.

(To be continued.)

POOR-LAW MEDICAL RELIEF.

[The subjoined circular has been issued to the Medical Officers of Unions by the Committee formed at the late meeting.]

Committee Rooms, 4, Hanover Square.
22nd November, 1847.

The Committee of the Poor Law Medical Officers submit to you the enclosed return; and they beg the favour of you to fill it up, and return it to them *with the least possible delay*.

In order to support the representations which they are about to make to the government, they feel it necessary to be in possession of the most full and accurate information as to the preseet state of medical relief throughout the country; and the only means of arriving at that information is, by the general transmission to them of the enclosed return. Where medical officers have not attended their districts so long as for the last five years, it will be sufficient to make the return for the time only that they have attended. Their attention is also particularly requested to the questions regarding the best mode of remunerating medical attendance on the poor.

The committee beg also to remind you, that considerable expenses have been, and must be, incurred, in the prosecution of their enquiries; and they earnestly request, that you will forward a subscription, by post office order, or otherwise, to the treasurer, Thomas Martin, esq., Reigate.

We are,
On behalf of the Committee,
Your's respectfully,
THOMAS HODGKIN, M.D., Chairman.
T. PIERS HEALEY, Hon. Secretary.

All communications should be addressed to the Honorary Secretary, 4, Hanover Square.

The questions submitted in the form of return are as follows:—

1. District. 2. Union.
3. Population. 4. Acreage.
5. Total number of sick as per weekly return.
6. Number of sick attended but not included in weekly return.
7. Amount of annual salary, exclusive of extras.
8. Amount received for extras.
9. Payment for midwifery:—Rate per case. Amount received.
10. What is your opinion as to the propriety of payment per case, and the amount?
11. What is your opinion as to a fixed salary, based on the number of cases attended, and the mileage?
12. What is your opinion as to payment for extra cases exclusively of midwifery?
13. What is your opinion as to fixed payment founded on the number of population and area, to be settled by the Poor-Law Commissioners?

The returns to embrace the five years ending Lady Day 1847.

General Retrospect.

PATHOLOGICAL ANATOMY.

CONGENITAL DEFICIENCY OF THE GALL-BLADDER.

Mr. Canton relates the following rare case. In examining the body of a female aged 65, his attention was directed to the circumstance of the trifling exudation of bile upon the neighbouring intestines, and on raising the liver he discovered that the gall-bladder was absent, there being only a small indentation in the liver at its usual position. Suspecting malformation Mr. Canton searched for the viscus or its remains, but without success; and on making slices of the liver without finding traces of it he was convinced that it was congenitally deficient. The liver was small, the right and left hepatic ducts of their usual diameter, uniting at an obtuse angle just below the transverse fissure to form a ductus choledochus, which was the common hepatic duct, larger than usual and double its ordinary calibre. The lining membrane of this trunk resembled the mucous membrane of the gall-bladder. The cystic artery, vein and nerves, were wanting.

In his comments upon the case, the author remarks upon the fact that the gall-bladder is often deficient in the lower animals; in mammalia, birds and fishes. He also notices the occasional degeneration of the viscus from disease, which might lead to the idea of its absence in consequence of its conversion into fibrous tissue; the mistake is, however, rectified by the presence of the cystic artery and vein. The author further observes, that no specimen should be set down as one of congenital deficiency of the gall-bladder, until careful sections of the liver have been made, to ascertain whether or not it is situated in the substance of the latter viscus, either in a perfect, contracted, or condensed state, in other words, still occupying the position of the early fœtal period. Again, the condition of the cystic duct should be noted, and its presence even in the modified state referred to, would justify the inference that the gall-bladder had at some period been present, though imperfectly developed, and that from imperfection of function had gradually disappeared. That the case under consideration is rare, is acknowledged by Mr. Kiernan, who is justly regarded as a high authority in matters connected with the anatomy of the liver.—*Lancet*, October 16th.

PRACTICAL MEDICINE.

INSANITY CURED BY THE USE OF THE TREPHINE.

Dr. Robertson, resident physician to the Yarmouth Military Lunatic Asylum, has furnished us with the following instructive case:—

A sailor, aged 23, was admitted into the Cumberland Lunatic Asylum, February 10, 1845. Ten years prior he fell from the mast of a ship, which accident was followed by an attack of acute mania. In six weeks he recovered his intellectual faculties, but continued so ungovernable in his temper and violent in his conduct, as to render him unfit to be at large, and to necessitate his removal to the Asylum.

On admission he complained of frequent pains in

the part of the head on which he fell, and also entertained the delusion that these pains were caused by his mother beating him. Otherwise his intellectual faculties were sound. Various symptoms of disease of the moral principle were present. He was morose, taciturn, and insolent. He entertained an ungrounded dislike to his relations, and was subject to violent fits of passion.

After being some time in the asylum, his delusion gave way, and the intellectual powers of his mind became sound; his conduct, however, continued ungovernable, and his language abusive, while kind words made no impression on his wayward temper. He still complained of pains in the injured part.

On examining the head, I discovered a very distinct depression on the posterior superior margin of the right parietal bone, the situation to which he referred the pains. In consultation with my colleague, Mr. Furness, of Percy Street, Newcastle, consulting surgeon to the Institution, it was decided that the depressed portion of skull be removed by the trephine.

On the 3rd of January, 1846, the operation was skilfully performed by Mr. Furness. The patient bore it well and the wound healed without a bad symptom. The portion of the cranium removed was healthy in appearance on both of its surfaces. It adhered very firmly to the dura mater, requiring considerable force for its removal. It was altered considerably in form, appearing to have been indented, rather than fractured, which is not improbable, seeing the accident occurred to the patient when only thirteen years of age.

By the 1st of February his conduct was, and had been, since the operation, in every way improved. He had had no bursts of passion; answered civilly when spoken to, and was grateful for the relief afforded him. He looked forward with pleasure to his return home, which was promised to take place as soon as the weather improved. He had for the last fortnight been working on the farm, and stated that since the operation, he had been free from pain in the head, from which he formerly suffered. On the 20th of March he was discharged "cured," having, since the performance of the operation, shewn no symptom of his previous malady.

MIDWIFERY.

LESIONS OF THE NERVOUS SYSTEM, &c., IN THE PUERPERAL STATE, CONNECTED WITH ALBUMINURIA.

Dr. Simpson has related some cases illustrative of the effects of Bright's disease, as denoted by the appearance of albumen in the urine under the action of heat and nitric acid. He draws the following conclusions:—

1. Albuminuria, when present during the last periods of pregnancy and labour, denotes a great and marked tendency to puerperal convulsions.

2. Albuminuria, in the pregnant and puerperal state, sometimes gives rise to other and more anomalous derangements of the nervous system, without proceeding to convulsions, and Dr. Simpson has especially observed states of local paralysis and neuralgia in the extremities, functional lesions of sight (amaurosis, &c.,) and hearing, hemiplegia and paraplegia more or less fully developed.

3. Œdema of the face and hands, going on occasionally to general anasarca, is one of the most frequent results of albuminuria in the pregnant female.

4. The presence of this œdema, or of any of the lesions of the nervous system, with or without the œdema, should always make us suspect albuminuria; and if our suspicions are verified by the state of the urine, we should diligently guard, by antiphlogistic means, &c., against the supervention of puerperal convulsions.

5. Albuminuria and its effects are far more common in first than in later labours, and these constitute a disease which in general disappears entirely after delivery; but Dr. Simpson has seen one case commencing with slight blindness, but no œdema, and ending gradually in hemiplegia, where the palsy partially remained after delivery, and after the disappearance of the albuminuria. In another patient amaurosis came on with delivery, and had been present for six months when Dr. Simpson first saw her. There was no œdema or other symptom of albuminuria except the amaurosis; but, on testing the urine, it was highly albuminous.

6. Albuminuria, with convulsions, &c., occurring in any labour later than the first, generally results from fixed granular disease of the kidney, and does not disappear after delivery.

7. In puerperal convulsions, &c., produced by albuminuria, the immediate pathological cause of the nervous lesion is perhaps some unascertained but poisoned state of the blood. Is there a morbid quantity of urea in the blood? In several specimens of the blood of patients suffering under severe puerperal convulsions, furnished by Dr. Simpson to Dr. Christison and Dr. Douglas Maclagan, these gentlemen had been unable to detect any traces of urea. Is the poisoning material caseine in morbid quantity or quality? The dependence shown by Gluge and others of albuminuria upon stearosis of the kidney, makes this connection worthy perhaps of some inquiry.

8. In cases of severe puerperal convulsions, &c., from albuminuria, the renal secretion is in general greatly diminished, and Dr. Simpson has found active diuretics apparently of great use along with or after venesection, antimony, &c., especially where the case was offering to become prolonged.

9. Sometimes hemiplegia supervenes during pregnancy without albuminuria, but this form does not seem to interfere materially, or very dangerously, either with the pregnancy or labour—the disease running its own usual course. In one case Dr. Simpson has seen the patient gradually but imperfectly recover the use of the palsied arm after delivery. In another no improvement occurred.—*Transact. of Edin. Obstetric Society.*

PUERPERAL CONVULSIONS CONNECTED WITH INFLAMMATION OF THE KIDNEY.

Dr. Simpson has pointed out the connection of puerperal convulsions with derangement of the kidney, as a very striking fact in obstetric pathology. He has seen *post-mortem* appearances of nephritis in some fatal cases of convulsions.

Case I.—In this case, the patient, a delicate female, was exhausted by the pains of labour, and complaining of severe headache when the convulsions supervened. Dr. Niven promptly and easily delivered the child, which was dead, by turuing. The convulsions gradually subsided, but re-appeared several times. In the intervals she was profoundly comatose; and, in this state she died about forty hours after the first attack. *Post-mortem* appearances.—When the lateral ventricle of the right side was opened, fluid blood escaped. The corpus striatum and outer part of the optic thalamus were broken up, and mixed with a large quantity of coagulated blood, forming a clot of large size. The fluid blood was found in the opposite lateral ventricle, and also in the third and fourth ventricles. The right kidney was converted into numerous cysts, of about the size of a walnut, containing unhealthy pus, which passed along the ureter and filled the bladder. The left kidney exhibited an advanced stage of Bright's disease.

Case II.—Dr. Simpson lately saw, with Dr. Carmichael, a lady, who had so perfectly recovered after a labour which was quite uatural, as to have been out at church, &c. Seven weeks, however, after delivery, after some sudden anomalous affections of sight and hearing for thirty or forty hours previously, she was seized with the most severe convulsions. Despite free evacuations, &c., they continued to recur from time to time, and proved fatal in three hours; the patient during that time never being perfectly sensible. The pelvis of each kidney was filled with a whitish purulent-like matter, and its mucous lining membrane coated with large patches of adherent coagulable lymph, or false membrane. The ventricles of the brain were distended with serous fluid. The urine, when tested, presented no sign of albumen.

Case III.—In a third case, one fit of convulsions came on a month before delivery, and recurred again in a severe and fatal form fourteen days after confinement. During the intervening six weeks the patient was free from any symptoms, and the labour was natural. The last attack came on suddenly in the evening, about nine o'clock; the convulsions were again and again repeated, and she died comatose in eight hours. Dr. Maclagan, Dr. Handyside, and Dr. Simpson, examined the urine during this last attack, but found in it no traces of albumen. On inspecting the body, some whitish turbid fluid was found in the renal pelvis, and could be pressed out abundantly from the renal papillæ. It looked like pus. On microscopic examination, it seemed to contain merely a very large quantity of epithelial cells, and no pus-globules. Was this inflammatory? There was no effused fibrin or coagulable lymph.

MEDICAL JURISPRUDENCE.

POISONING BY VINEGAR.

Dr. David, of Montreal, narrates the case of a widow woman, with four children, who took, as near as he could ascertain, a quart-bowlful of common vinegar. It appears she had been dull and low spirited for two or three days previously, in consequence of the neglect (as her friends suppose,) of a person from whom she had received the most marked attention, and to whom she had been attached prior to her marriage with her late husband. When Dr. David saw her, about three hours after she had taken the vinegar, she was in bed, covered with a cold perspiration, and trembling from head to foot, and apparently alarmed at everybody, and everything about her. Her breathing was very laborious and hurried; her countenance perfectly wild, and the pupils dilated; the tongue was dry and cold, pulse 96, and full; the abdomen much distended, with extremely acute pain at the *scrobiculus cordis*, so much so that the slighest pressure there caused her to shriek out. She did not know any one about her, not even her own children, nor had she any recollection of anything that had happened from the time of taking the vinegar, which was about eleven at night, not even of her having gone to bed, which she was the last in the house to do. At one, the inmates were all awakened by her shrieking for cold water, of which she had drunk an enormous quantity before Dr. David was called to see her. There was not any pain, heat, nor constriction of the throat or fauces, but there were slight efforts to vomit. Having procured some sulphate of zinc, he gave her two scruples in a cup of water, which soon produced full vomiting, with great straining. He had then to leave her, but ordered full and repeated doses of carbonate of magnesia till he could see her again, which he did about six hours after, and found her much relieved, and only complaining of headache, which left her after the operation of a dose of castor oil. Two days after she was taken ill with a slight attack of continued fever, but is doing well.

Dr. David mentions that the quantity she threw up from the effects of the zinc was very great, and smelt strongly of vinegar, which she still perseveres in saying she did not take, although she was seen with the bowl filled with it in her hands by some of the family, when they were retiring to rest, she maintaining that she used the whole of the vinegar in bathing her head. However, Dr. David thinks we have strong presumptive evidence against her having so used it, and are justified in concluding that she took the whole of it. The only case of poisoning by acetic acid that the author has been able to find is the one related by Orfila in the *Annales d' Hygiene*, and quoted by both Beck and Christison. The experiments instituted by Orfila prove that common vinegar in large quantities was found destructive to dogs when vomiting was prevented. Taylor, in his work on "Medical Jurisprudence," says—"Acetic, citric, and tartaric acids are not commonly considered to have any poisonous action on the body, at least as far as I know, there is no case reported of them having acted injuriously on the human subject," and he is the only modern writer on medical jurisprudence who takes any notice or makes mention of the acetic acid.—*British American Journal.*

CEREBRAL DISEASES OF CHILDREN.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Mr. Salter has, I think you will find, made a mistake in his paper upon the "Cerebral Diseases of Children," in a late number, when he refers to the celebrated induction of Louis, which Mr. Salter states to be, "that if tubercles be found in the brain, they are sure to be met with in other organs, especially the lungs," Now, it is quite true that Louis considered tubercles of the brain and grey semi-transparent granulations of the pia mater as morbid changes proper to phthisis; but I am not aware he ever drew the deduction, that "tubercles being found in the brain, they are sure to be met with in *other* organs, especially the lungs." What I have always understood as the great deduction of Louis, is the general law, stated in the summary to his Pathology of Phthisis, p. 153, of the translated edition, published by the Sydenham Society, "That after the age of fifteen, tubercles do not present themselves *in any organ* without being likewise seated in the *lungs*."

It is necessary that we should be very careful in correctly stating the deductions of a man like Louis, and therefore I venture to call Mr. Salter's attention to it.

Mr. Salter will also, I think, find that the quickening of the slow pulse of hydrocephalus acutus by the slightest exertion, is a fact well known to systematic writers. I refer him more especially to the "Cyclopœdia of Practical Medicine," and to Watson's Lectures.

Your obedient servant,

C. R. BREE.

EFFECTS OF CHLOROFORM.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I yesterday had an opportunity of trying the effects of chloroform on a boy, seven years old, who had met with severe injury to the ancle-joint. A small piece of sponge was dipped in the liquid and applied to the nostrils, and in about two minutes he sank into apparently a sound sleep, the lips and countenance retaining their usual colour. I then amputated the leg below the knee, assisted by Mr. Gibbon, and Mr. James Roughton, the boy remaining quite unconscious until all was finished; he was then placed in bed, passed a good night, and up to the present time he has had no unfavourable symptom.

I am Sir, your obedient servant,

W. S. WYMAN.

Kettering, November 28th, 1847.

MEDICAL REFORM.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The most, I take it, to be complained of in the recent Charter of the College of Surgeons, is its retrospective effect,—that is, if the name or distinction of "Fellow" gives any material advantage to its possessor, seeing that all the members before the granting of the Charter (exclusive of the Council,) were *de jure* equal.

The Fellowship confers no legal or positive advantage on those who have been some years in practice, neither is the possession of it in one likely to injure another, who does not hold it, but who has acquired a well-deserved confidence in his professional character.

I believe that much good will ensue from what will be required of those who, from motives of laudable ambition, seek for the Fellowship; and I contend, that so far, the Council is to be commended for its onward movement. The public is becoming daily more acquainted with these distinctive tests of qualification, and I am of opinion the more that is required as a proof of fitness, the higher will be the estimation of the public towards those who have undergone the superior ordeal. Here then, I hold, that it is altogether illiberal and impolitic, to frustrate or hinder the changes of every succeeding age, so long as justice and fair dealing is kept in view by the authorities which promote them.

To my mind "it seems strange, passing strange," in the general question of Medical Reform, that the great interests of the medical profession, as a body, should be so utterly thrown aside and uncared for; that, as a profession, it should neither be legislated for, or its position at all a matter of public concern, because forsooth, of sections and divisions amongst its own members, whose jealousy is roused as soon as any general scheme does not comprehend or provide for their particular cases.

Mr. Garlick may use his statistics, and Mr. Daniell may continue to declaim in his own energetic perorations; but if medical practitioners do not observe towards each other that consideration and forbearance which, as professional men, they ought to do, it is frivolous,—nay, more, it is useless, to complain of guardians, commissioners, or others.

"Quæque ipse miserrima vidi."

The lawyers and the clergy do these things, better and it behoves the men of physic to pursue a widely different course than they have hitherto done, in order to obtain a security and a safeguard for their real and permanent benefit.

November 4, 1847. A. J.

STATE OF THE MEDICAL PROFESSION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

How common is the remark amongst medical men that theirs is an ill-used profession! It is notorious that we are not only the servants, but even the slaves, of the public; and we find injustice perpetrated against us in such a diversity of ways as to find no parallel in any other profession or calling.

Your readers have been often gratified at the stand which you have frequently made against injustice and oppression on the part of coroner's juries, guardians of the poor, and the public. It appears to the writer that this is a very fitting opportunity for a full and

searching investigation into *all* the causes and attendant circumstances of a state of things which all deplore, and from which we should rejoice to be delivered. Our interests loudly call for inquiry, and the *honour of our profession demands it.*

It was with no inconsiderable degree of pleasure that a month or two ago we observed a letter signed "Scrutator" bearing upon this question, and an able, but not conclusive leading article, about the same time. Since then, however, the subject has been suffered to die away until your last number appeared, containing a "Report of a Meeting of Poor-Law Union Officers." It is to be hoped that this will prove a fresh occasion for you to buckle on your armour afresh, and to stand forth in all the strength of a righteous cause, as the champion of the oppressed.

Before I conclude, allow me respectfully to suggest the following query:—"*How far is the profession itself to blame for the low and degraded position in which its members too often find themselves placed?*

I am, Sir,

Your obedient servant,

PRÆMIUM.

Manchester, November 8, 1847.

Medical Intelligence.

PROGRESS OF THE CHOLERA.

The cholera is stated to have reached St. Petersburg and Cronstadt, and has also appeared, but in a very mild form, at Dunaburg, about forty miles from the frontier of Prussia.

APPOINTMENTS.

Thomas Shapter, Esq., M.D., has been elected Physician to the Devon and Exeter Hospital, in the room of Dr. Blackall, resigned.

George Johnson, Esq., M.D., Medical Tutor of King's College, London, has been appointed Assistant Physician to King's College Hospital.

Edward Cock, Esq., has been appointed one of the Surgeons of Guy's Hospital, in the room of Mr. John Morgan, deceased.

Sir Henry Marsh, Bart., late President of the College of Physicians in Ireland, has been appointed to the Irish Board of Health, to succeed Sir Robert Kane, who has resigned.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, November 19th:—J. P. Teebay; W. Pearce; G. R. Pemberton; W. Fincham; J. W. Elliott; W. J. Edwards; G. Raper; J. Urquhart; J. F. Uniacke; G. H. King; N. D. S. Wallich; T. Green.

Gentlemen admitted Members on Friday, November 26th:—R. Dowell; H. W. H. Richardson; M. T. Mason; T. H. Mitchell; J. Marshall; E. Stride; G. T. Banks; J. Robinson; T. Smith.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, November 11th, 1847:—Walter Thompson, London; William Braithwaite, Plymouth; William Pearce, Bingley, Yorkshire; Thomas Watson, Bristol; Charles Pratt; John Braxtor Hicks, Lymington; Stewart Blacker Roberts; John Glendarvnie Winstone, London; Benjamin French, Neath; James Lardner Green, Holywell.

Thursday, November 18th:—Robert Walmisley Baxter, Bromley, Kent; Benjamin Kealley, Westminster; John Beecroft, Ely; Robert Alexander Wm. Westley, Bombay.

OBITUARY.

Died, November 10th, at Ardee, Felix M'Donnell, Esq., M.D.

November 11th, aged 52, at Berlin, of apoplexy, John Frederick Dieffenbach. This celebrated surgeon was born at Konigsburg, in the year 1795, and was originally a student of theology. He entered the medical profession after having served as a volunteer during the war in 1814 and 1815, and became a pupil of Dupuytren, at the Hotel Dieu, Paris, in the year 1822.

November 14th, at Dundalk, of fever, Lawrence Martin, Esq., M.D.

November 15th, aged 75, Joseph Toulmin, Esq., M.R.C.S., of Hackney.

BOOKS RECEIVED.

On Indigestion: its Pathology and Treatment, by the Local Application of Uniform and Continuous Heat and Moisture. By James Arnott, M.D., Physician to the Brighton Dispensary. London: Churchill 1847. 8vo. pp. 107.

An Essay on the Diseases of the Jaws, and their Treatment. By Leonard Koecker, Surgeon-Dentist, &c. &c. New Edition. By J. B. Mitchell, M.D., Surgeon-Dentist. London: Churchill. 1847. 8vo. pp. 94.

Inaugural Address of the Pharmaceutical Institution. By Samuel Wright, M.D., F.R.S.S.A., Professor of Clinical Medicine in Queen's College; Physician to the Queen's Hospital, &c. Birmingham: 1847. pp. 14.

The Calendar of the Queen's College, Birmingham. 1848. Edited by the Dean of the Faculty. Birmingham. Tonks. 1848. pp. 110.

TO CORRESPONDENTS.

Communications have been received from Dr. J. Y. Simpson; Mr. C. R. Bree; Mr. C. J. Thicke; Mr. Bottomley; Dr. Oke; E. L.; the Sheffield Medical Society; Mr. Crompton.

The important paper on "Hernia," by "a Retired Surgeon of the Irish College," has been unavoidably delayed, but will appear in the next number.

Mr. Crompton's communication was received too late for insertion in the present number.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

MEMOIR ON TURNING, AS AN ALTERNATIVE FOR CRANIOTOMY AND THE LONG FORCEPS, IN DEFORMITY OF THE BRIM OF THE PELVIS, &c. &c.

By J. Y. Simpson, M.D., F.R.S.E.,
Professor of Midwifery in the University of Edinburgh, &c. &c.

PART I.

Sect. I.—Illustrative Case, and Introductory Remarks.

At a meeting of the Obstetric Society, of Edinburgh, held on the 20th of January, 1847, I had an opportunity of shewing to the members a large infant, extracted on the preceding evening by the operation of turning, through a pelvis, the brim of which was greatly contracted. The following particulars were at the same time stated regarding the history of the case.

Case I.—The mother was very lame, with the lumbar vertebræ much distorted, and had been twice pregnant. Her first labour had been extremely protracted, in consequence of the promontory of the sacrum projecting forwards and downwards, so as to diminish much the conjugate diameter of the brim. After being several days in labour, symptoms requiring interference supervened, and Mr. Figg, her medical attendant, availed himself of the able advice of my friends, Drs. Malcolm and Marr. These gentlemen considered it proper to ascertain whether the child might not be capable of being delivered, without the dire necessity of embryulcio. After a long and cautious trial, however, of the long forceps, they found it impossible to advance the head with them, and were at last driven to have recourse to craniotomy. Even after the cranium was perforated, and freely broken down, it was found a matter of much time and difficulty to drag with the crotchet the collapsed head of the fætus through the distorted brim, and the patient made a very long and protracted convalescence.

She was earnestly advised to have premature labour induced, provided she again fell in the family-way; but Mr. Figg was not made aware of her state till she was near the end of the ninth month of her second pregnancy, and when it was too late to justify interference. Parturition supervened in a few days. I saw her with him in the afternoon of the 19th of January, a few hours after the first labour-pains had commenced. The os uteri was tolerably well dilated, the membranes still entire; and the head, which was difficult to reach, was found high and mobile above the brim of the pelvis; a pulsating loop of the umbilical cord was prolapsed before it. During the course of the few following hours, no advance being made, I proceeded shortly after nine in the evening, (the labour had commenced in the forenoon,) to make the mother inhale the vapour of sulphuric ether, and to extract the child, as I had previously determined to do, by the operation of turning. The os uteri was so dilated, as not to offer any impediment to the introduction of the hand; the head was pushed aside, and a knee seized with great ease. With this hold the infant was readily turned, and its extremities and trunk drawn down, but the extraction of the head through the distorted brim was a more difficult task. After the arms were brought down, very great exertion in the direction of the axis of the brim was required before the head was extracted; still not above two or three minutes elapsed from the first introduction of the hand till the complete extraction of the infant. It gasped several times after it was born, but full respiration could not be established. Its head was compressed laterally, the left parietal region flattened, and the anterior part of the right parietal bone deeply indented by the pressure to which it had been subjected against the projecting promontory of the sacrum. The transverse or bitemporal diameter of the head at the seat of the indentation, was found, on careful admeasurement, and when held compressed by the fingers, not to be above two and a half inches. Hence the conjugate diameter of the brim did not, in any probability, exceed this. The infant, a female, was large, and above the usual size; it weighed exactly eight pounds, the average weight of the female infant at birth being about six pounds and three quarters. In consequence of being placed under the complete anæsthetic influence of the inhalation of sulphuric ether before the operation was begun, the mother was quite unconscious of pain or suffering during the whole process of the turning and extraction of the infant. She made a recovery that was uninterruptedly good and rapid, and left her bed, dressed, and walked into the next room, on the fourth day after delivery.

The preceding case was, at the time of its occurrence, one of intense interest to me in two points of view. For *first*, it was the first case in which I or any other accoucheur had ever tried the effects of

æther-inhalation during labour, and so far it is, I believe, destined to form the commencement of a new and important epoch in obstetric practice. But *secondly*, the case appeared to me to be one of great moment as an apposite illustration of views which I had been previously led to entertain, as to the possibility and propriety of substituting, in some instances, extraction by the feet for extraction by the crotchet—the delivery of the infant by the hand of the accoucheur instead of its delivery by instruments—the lateral compression of the child's head by the contracted sides of the pelvis, instead of its more dangerous oblique or longitudinal compression by the long forceps,—and, *above all, the transient and not necessarily fatal, depression of the flexible skull of the fœtus, for the destructive and necessarily deadly perforation of it.*

It is in this second or latter point of view that I propose to consider the preceding and other analogous cases in the present memoir.

In directing the attention of the Obstetric Society in January last, to the case which I have stated above, and its relations to the question of turning, I took occasion to state that I had practised the same operation as an alternative for craniotomy and the long forceps, in other instances in which the head had been morbidly detained at the brim, from the existence of disproportion between the two; and that I believed it to present the following advantages over embryulcio:—It gave the child a chance of life; it was more safe to the mother, because it could be performed earlier in labour and more speedily; it enabled us to adjust and extract the head of the child through the imperfect pelvic brim in the most advantageous form and direction, the head flattening laterally under the traction; the neck (if the child were living or only lately dead,) was so strong as to allow us to exert such a degree of traction upon the obstructed head, that the sides of the cranium might become very greatly compressed, or even indented under it, and that without necessarily destroying the child; and lastly, it was a practice which could be followed when proper instruments were not at hand, and the avoidance of instruments was generally desirable, when it was possible.

These observations were published in the March number of the "Monthly Journal of Medical Science," (p. 718.*) In a later number of the same Journal, in describing a case of delivery through a pelvis extremely deformed by maalacosteon, I took occasion to discuss, in brief terms, the different means of treatment required in contracted pelves of different dimensions; and I repeated in the same words the above advantages of turning in comparison with embryulcio. At the same time I stated in addition, in relation to the theory of the practice, that "I believed that when the child presents by the feet, and thus the apex, instead of the vertex or base of the cone, formed by the head and body of the fœtus, comes first, it may make its transit without embryulcio, through a pelvis, the smallness of which would otherwise have necessitated mutilation or the operation of craniotomy."

The essay from which I make this extract appeared in the No. of the Journal that was published on the 1st July, 1847.

A few weeks subsequently,—viz., in the *Provincial Medical and Surgical Journal* for July 28, Dr. Radford, of Manchester, engaged in the investigation of the question, by publishing a communication "On Turning in Labours rendered Difficult by Distortion of the Pelvis." In this communication Dr. Radford avoids all allusion, by name or reference at least, to the previous observations which I had ventured to offer to the profession on the subject, and he propounds the practice to his readers as if it were a new and original suggestion on his own part, as far as British midwifery is concerned. At the same time, in a spirit of true humanity, which does him high honour, he strongly declares, that "whatever practice can safely supersede the murderous operation,—craniotomy,—should be adopted." "The records of operative midwifery ought not (he observes,) to be stained with so barbarous a procedure, which, according to the present recognized principles of practice, is so unconditionally and so unhesitatingly performed." And, he adds, "It cannot be a matter of surprise that I should, entertaining opinions that craniotomy ought to be considered an operation of necessity, and not of election, hail with delight any measure which only promises to lessen the number of these destructive operations."

Afterwards, Dr. Radford proceeds to offer some remarks which evidently shew that he has mistaken alike in its principles and in most of its details, the alternative operation which I had proposed to substitute for instrumental delivery; the fault, however, is, I believe, chiefly or entirely, my own, and is a natural result of the brevity and imperfections of my previous notices on the subject. Indeed, I have reason to know, that Dr. Radford's misconceptions of the proposed practice are, on this very account, shared in by many others. It is with the anxious view of remedying this defect that I draw up the present communication, and I trust that the great practical importance of the questions discussed in it, will stand as some apology for the otherwise unwarrantable prolixity and repetitions that may possibly be observed in the discussion.

In following out the object I have indicated, I will treat severally and successively of the kind of cases which gave rise to the suggestions of the proposed practice; of the theory, principles, or mechanism of the practice; and of its advantages in relation to the curtailment of the duration of labour. I will then answer the objections which I have heard raised against it, in relation to the safety of the infant, and the safety

* I had previously stated the details of the case at page 639, and again at page 721.

of the mother; and I will, lastly, consider the classes of cases best adapted for the practice, and the conditions requisite for its success.

SECT. II.—EVIDENCE SUGGESTIVE OF THE PRACTICE.

In studying in their more minute details, the obstetric histories of recorded cases of morbid contractions of the pelvis, I have been often forcibly struck with the circumstance, that apparently when the child presented præternaturally, and in consequence, ultimately passed with the feet or pelvic extremity first, the labour seemed frequently both easier and safer to the mother and infant, than when, in other labours in the same patients, the head of the fœtus happened to form the presenting part. In this way, mothers who had always suffered under very severe and instrumental labours, when their children presented with the head foremost, were, I found, not unfrequently fortunate enough to escape far more easily, when, at other times, the infant chanced either to present originally with the feet, or had the feet artificially brought down during the labour in consequence of the infant lying transversely with the arm or shoulder constituting the presenting part;—nay, the history of some few cases incidentally but strongly showed, that when the distortion and obstruction in the maternal passages were so great as to have invariably necessitated in all the previous labours the death of the infant by the operation of craniotomy, a living child was occasionally at last happily born alive, when it happened to pass or to be brought through the contracted pelves as an original or artificial footling presentation. In such instances the presentation of a hand or foot, when first discovered at the commencement of labour, has been regarded as an undoubted source of increased danger and difficulty, but it has at last more frequently proved a source of increased safety to the mother, and the indirect means of the preservation of the infant.

As an illustration of these remarks I might appeal to the evidence of many different cases observed and recorded by different authors, without any view to such a question as that which forms the subject of the present memoir. But to avoid superfluity of proof, I will in the mean time restrict the evidence to a very abridged statement of the cases of the kind recorded by one or two authors; and for this purpose, I first select the work of Dr. Smellie, believing, as I sincerely do, that his writings are not less remarkable for the strong thoughts and singular practical sagacity which they display, than for the spirit of candour and truthfulness with which all his facts are reported. In his volumes, Dr. Smellie has recorded an unusual number of contracted and distorted pelves; among them I find the following cases illustrative of the remarks which I have ventured to offer in the preceding paragraphs. The three first cases relate to natural pelvic presentations; the two last are instances in which the child was extracted footling, in consequence of its presenting transversely, or with the upper extremity.

CASE II.—To a woman "who had suffered *very much* in her former labours from the pelvis being distorted," Dr. Smellie was called, and found the breech of the child presenting. The extraction of the head required considerable management, but the child was saved. (*Collect.* 32, Case 10.)

CASE III.—Dr. Smellie's assistance was requested for a patient with "the breech presenting, and the pelvis distorted." The midwife told him "that the woman's former labours had been *very* difficult and tedious, but now as the breech presented she was afraid the difficulty would be greater." He "saved this child also, although a good deal of force was used to deliver the head." (*Ibid*, Case 2.)

CASE IV.—A woman, with the "pelvis narrow," and "who formerly was used to have tedious labours," had a breech presentation. Dr. Smellie brought down the legs, "as the breech did not advance with the assistance of the strong pains." The child was delivered with difficulty, but alive. (*Ibid*, Case 13.)

CASE V.—A woman, with "the pelvis distorted and awry, from the right ilium being much higher than the other," was three times pregnant. The first labour was terminated by craniotomy. The child in the second labour was premature, and presented by the arm. It was brought away alive by turning. In her third labour the child reached the full time, presented by the head, was turned, and lost. (*Ibid*, 34, No. 2, Case 1.)

CASE VI.—A woman, with "a narrow and distorted pelvis, from the three lowest vertebræ of the loins bending forward," four times reached the full period of pregnancy. In her first and third labours the child required to be mutilated by craniotomy before delivery could be accomplished. The infant in the second labour was small, and "with the greatest difficulty saved, by the assistance of the forceps." At the fourth confinement the right shoulder of the child presented. Dr. Smellie first tried cephalic version, but failed. He then seized one leg, turned the child, brought out the body and extremities, and ultimately, after much exertion, extracted the head. The child was alive. The mother recovered better than in any of her preceding labours. (*Ibid*, No. 5, Case 2.)

In his "Clinical Midwifery," Dr. Lee reports the following case as one probably similar to those which first suggested the propriety of the artificial induction of premature labour:—

CASE.—The patient had been five times pregnant. She was delivered of her first child by craniotomy. Dr. Lee employed the same operation to deliver her at her fourth confinement. "At the end of the seventh month of her second pregnancy labour came on spontaneously, and the child was born alive without artificial assistance, and has been reared." Her third pregnancy was terminated by labour coming on at the commencement of the eighth month. "The

nates presented, and the child was also extracted alive." "Dr. H. Davies induced premature labour at the seventh and a half month of her fifth pregnancy, and the child was born alive, but died soon after in convulsions."

Occurrences similar to what happened in the preceding case must, observes Dr. Lee, "originally have suggested the idea of bringing on premature labour artificially in cases of distorted pelvis, and probably led, in 1756, to that consultation of the most eminent practitioners in London, at which the practice was approved of, and soon after successfully carried into effect by Dr. Macaulay;"* and by a similar study of the modes of delivery occasionally adopted by nature in the same cases of distorted pelvis, we have, I think, suggested to us likewise the propriety of artificially turning and extracting the infant as a footling presentation. I shall cite only one other case from the same writer, shewing the degree of difficulty in contracted pelvis to be less when the child passes by a pelvic or footling presentation, than when it presents and passes by the cephalic extremity.

Case VII.—A patient, with the outlet and brim of the pelvis, both considerably contracted, was delivered of her first child by craniotomy, after being more than forty-eight hours in labour, and extremely exhausted. "The difficulty," Dr. Lee remarks, "experienced in extracting the head with the crochet, after it was opened, *proved* that delivery could not have been completed by any other method." At her third labour she was again delivered by craniotomy, after the labour had endured for some time, and four fits of convulsion had supervened. "I found her," says Dr. Lee, "completely insensible, with dilated pupils and constant convulsive movements of the muscles of the face. The pains continued with such violence, and recurred at such short intervals, that I dreaded rupture of the uterus. * * * The small size of the pelvis, the impossibility of applying the forceps to the head, the imminent risk of rupture of the uterus, with the result of the former labour, were the circumstances which made me to determine to open the head" At her fourth confinement, the child's head was again perforated. Labour had commenced on the 2nd of December; the liquor amnii escaped soon after; the pains continued strong and regular during the whole night. On the morning of the 8th, (six days after labour "had commenced,") the head was still wedged in the brim, the abdomen tense, the patient occasionally delirious, &c., craniotomy was performed. The patient was thus delivered by embryulcio in her first, third, and fourth labours. The history of her second confinement is this,—"I proposed to induce premature labour on the 21st of July, 1835, when she was seven months and a half pregnant; but she would not consent to this. Labour came on spontaneously at the commencement of the ninth month of pregnancy; a foot presented, and the child was extracted dead, without craniotomy."*

These, I repeat, and similar instances, (and I shall have occasion to quote cases still more striking in the sequel,) appear to me to point evidently to this probable conclusion,—that in particular forms and instances at least, of distorted pelves, the passage of the child by the feet or pelvic extremity, affords to it and the mother some special facility of transit which is wanting when the head or cephalic extremity forms the presenting part. And we have thus placed before us this problem,—upon what does this greater facility and safety of footling, as compared with head presentations, in such cases, depend? Let us proceed to the consideration of this point, and attempt to ascertain how this result is obtained.

* Clinical Midwifery, Case 81, p. 39.

(*To be continued.*)

* "Clinical Midwifery," p. 62.

THE HISTORY OF AN EPIDEMIC CONTINUED FEVER,

AS IT OCCURRED IN THE PARISH OF GREAT FINBOROUGH, SUFFOLK, IN THE AUTUMN OF 1846; RELATED MORE PARTICULARLY AS ILLUSTRATIVE OF THE DOCTRINE OF CONTAGION.

By C. R. Bree, M.R.C.S., Stowmarket.

It is not my intention to write a treatise upon fever; or to frighten my brother associates with a lengthened disquisition upon disputed points, connected with what Dr. Graves has termed, the most intensely interesting of all subjects connected with medical science. My object in the following remarks is to state broadly, clearly, and I trust concisely, some of what I think will be found not uninteresting facts, connected with the all-absorbing subject of continued fever.

The parish of Great Finborough is situated upon rather high ground, three miles in a south-westerly direction from Stowmarket, on the road to Hadleigh. Like almost every other rural village in the county of Suffolk, it is distinguished by stagnant ditches, neglected horse-ponds, and ill-arranged cess-pools, which are more or less to be discovered surrounding the thin, cold, damp, confined, lath-and-plaster-built cottages, which are allotted as residences to our labouring poor. Its geological characters are simple and easily described. Fifty, sixty, or seventy feet of alternating blue and yellow diluvial clay, or drift as it is termed, with the chalk formation at the bottom, and from four to ten feet of heavy loamy soil at the top.

I will not say that any of the above points had anything to do with my first case of fever, as I was not able to trace it to contagion. It will be found that with most of the other cases there was no difficulty in settling this point. For convenience, I have drawn a rough diagram of the parish, numbering the infected houses corresponding to the cases in the order in which they occurred.

The first case which occurred in the parish was on the 25th of August, 1846, at least, this is the date of my first visit. As the symptoms in all the cases were as similar as could be expected from the same disease affecting different individuals of various ages, I will content myself with briefly describing this case, which will do as a type of the rest. *Ex uno disce omnes.*

Case 1.—A. Garrad, the wife of a labouring man residing in the cottage marked below, No. 1, sent for me on the 25th of August, 1846. She had, I found, been *drooping* as it is emphatically termed, for several days; a general sense of debility, weariness, pain in her bones, loss of appetite. To these symptoms were added when I saw her; severe pain in her head; dry tongue, furred in the centre, with the edges, and small islets here and there, dry, smooth, and perfectly clear; a quick pulse, 120, small and irritable; flushed cheeks, and a hot dry surface; abdominal tenderness, and diarrhœa; urine dark coloured, depositing a thick dusky-coloured sediment.

These symptoms gradually increased in intensity, but they were all present when I first saw my patient. In three days, however, the headache had gone on to delirium, and on the 31st my notes record—violent delirium; great depression marked by loaded tongue; teeth and gums covered with sordes; picking of the bed-clothes; cold extremities; quick irritable pulse; in fact, a tendency to death by asthenia. But there were no spots or vibices, or discharge of blood from the bowels either in this or any of the other cases.

Up to this period my treatment had been, cold to the head, and sponging the surface with vinegar and water; the daily exhibition of an enema of a cupful of starch, containing half an ounce of the syrup of poppy, (which will generally control the diarrhœa;) mustard poultices daily to the ankles; and the exhibition of ten grains of the Pulv. Sodæ Comp. of Guy's Hospital every six hours, with a draught containing ten grains of carbonate of soda, and three of carbonate of ammonia, in an ounce of water, every three hours.

On the 31st, however, it was quite clear that the patient was in great danger, and would die, unless I could *keep her alive;* I therefore discontinued the cold and the medicine, and having procured a bottle of wine, I directed the nurse to give my patient a wine-glassful every three hours, or oftener, according to circumstances: my directions being, "the more delirium, the more wine." These directions were well followed up, and the best part of the bottle was gone next morning. The patient was still very ill, but we had established a footing, and our enemy was half vanquished. There was more warmth in the extremities; the pulse was firmer and fuller, though still ranging from 120 to 130; and there was a little moisture on the skin. I kept up this advantage. On September 5th my patient had taken three bottles of wine, *and was safe.*

I need not describe the process of amendment,—the gradual abatement of delirium, replaced by sleep, the increased action from the skin, the lowering of the pulse, and the gradual cleaning of the tongue,—these are familiar features, and pleasing ones, too, in the diary and the retrospect of all practical men. But my patient had a long convalescence; although after the 5th of September she was safe from the imminent danger which had threatened her, and from which she had been snatched by the all-powerful agency of port-wine, she had yet to encounter the effects of disease. Emaciation, great debility, irritability of mind, are, I find, the prominent features of my notes of September 11th, and it was some weeks before nourishing diet and suitable tonic remedial agents had restored her to health.

Case 2.—On the 21st of September, Susan Pegg, the woman who had nursed the above case, told me during my visit that she felt ill. I detected the premonitory symptoms of fever, and sent her home.

By a reference to the diagram it will be seen, that there is a remote cluster of cottages, to which,—by way, I presume, of special honour,—the name of "city" has been given. The city, as I know, from many years' experience, is situated in the winding of a miserable lane, in an isolated corner of the parish. It consists of five tenements, duly marked and numbered in the diagram. From time immemorial it has been celebrated for its open undisguised dirt. Deep ditches filled with stagnant water, open privies, pigsties abutting upon the road, and half obstructing the view of five miserably-built cottages, are the salient objects in this dreary and melancholy picture. And yet it is not with these,—viz., pigsties, ditches, and filth, that I am now about to find fault, or accuse of any participation in what I am going to relate. It was here,—to the cottage marked No. 2,—that Susan Pegg, the nurse of Mrs. Garrad, was brought, and she went through the disease with nearly the same symptoms and intensity as No. 1. The treatment was the same, with one exception,—*i.e.*, I began the wine earlier, on the fourth, instead of the seventh day. She recovered, and her convalescence was more rapid than in the former case.

As usual, in the country, there was a great outcry about "the fever," and no one would go near poor Mrs. Pegg, the mother of eight children, except the wife of John Threadgill, who lives in the cottage marked No. 3. The cases of fever that followed Susan Pegg, in this locality, with the result, were as follows:—

October 28th.

Case 3. Jemima Pegg, aged 12.
4. John Pegg, aged 4.
5. Rebecca Pegg, aged 2.
} Children of No. 2. All recovered.

October 31st.

6. Emily Pegg, aged 11. } Child of No. 2. Recovered.

November 2nd.

7. John Threadgill's wife. } Nurse of No. 2. Recovered.

November 6th.

8. Susan Pegg, aged 14.
9. Ruth Pegg, aged 5.
} Children of No. 2. Recovered.

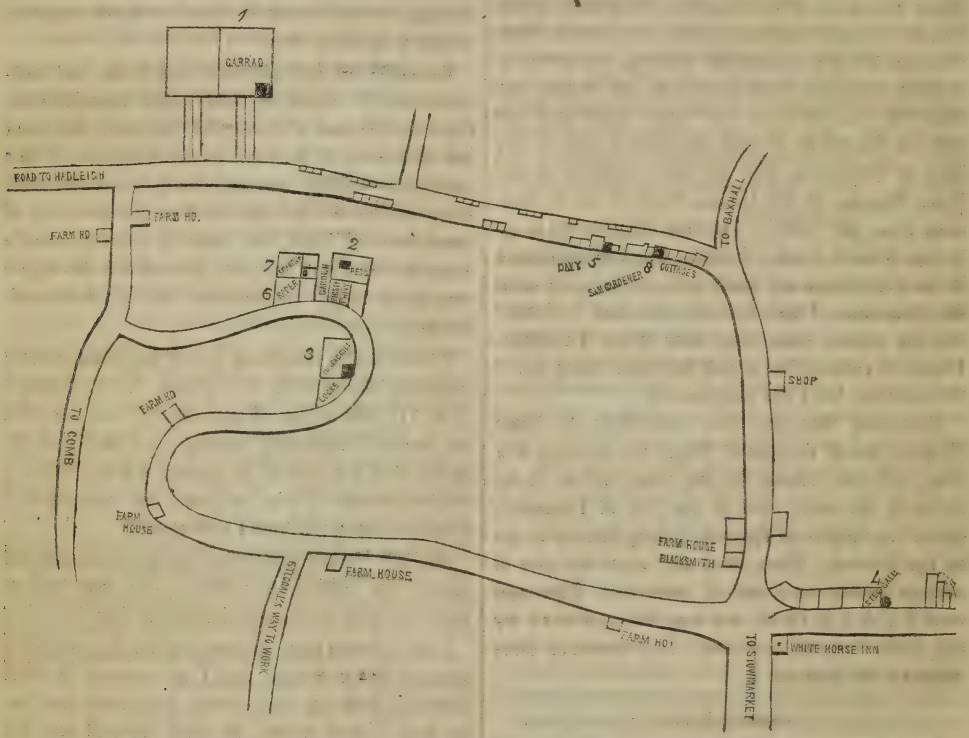
November 19th.

Case 10.—Ann Threadgill, the daughter of No. 7, a girl aged 18, left her place at Stowmarket, to nurse

her mother. She was attacked with premonitory symptoms on the 19th, and on the 20th was delirious. She had, in addition to the other symptoms, inflammation of the tonsils, which caused great difficulty in getting either medicine or wine into the stomach. She died on the 5th of December, on the 15th day of the attack. I injected broth and wine into the rectum, and believe she was kept alive several days by this means. This was the only fatal case.

November 21st.

Case 11.—Henry Pegg, aged 20, a railway labourer, residing at Stowmarket, four miles from his father's residence. After his mother (No. 2,) fell down with the fever, he visited her several times, but previously to the 21st of November he had not been at home for a fortnight. He was attacked with fever in Stowmarket on the 21st, and sent home to Finborough, on the 22nd, by the medical officer of the parish of Stowmarket. He had the disease severely, but recovered under the use of large quantities of wine. I did not hear of any case arising in Stowmarket.



Hitherto we have traced the disease in a regular unbroken chain of contagion. We have now to follow the fever beyond the precincts of the "city," and singularly enough the next case occurred in a remote part of the parish, and the only two links which will be either wanting or doubtful, occur in the next two cases.

November 27th.

Case 12.—John Steggall, living in the cottage marked 4, was attacked with the premonitory symptoms of fever on the 27th of November. He had not worked nor spoken with any of the parties or their relatives who had hitherto had fever. Mrs. Pegg (No. 2,) however, had one day called at the door of the house of the farm upon which he worked, for milk; she remained outside the door, and he (John Steggall,) had not seen her. He had, however, precisely the same kind of fever in its worst form, but recovered under the same treatment as I have detailed in the first case. This man's home is remote from the "city," but in going and returning from his work he passed night and morning, within half a mile of it. None of this man's family or his neighbours, residing in eight or ten cottages joining his own, had fever.

November 29th.

Case 13.—William Davy, a married man, aged 40, was attacked on the 29th of November. *He had worked one day with John Threadgill, the father of* No. 10, *and husband of* No. 3. His residence is marked 5. He had the disease mildly, and none of his family or neighbours caught it.

I have now to relate one of the most singular features in the history I am detailing. By referring to the diagram and again returning to the "city," it will be found that this locality consists of three houses divided into the residences of five families. Pegg and Threadgill's history has been related. Locke and his wife (two elderly people living next door to Threadgill,) migrated as soon as the fever broke out to some friends in a distant parish, and escaped.

The third house it will be perceived is separated from Pegg's by a garden. This house was inhabited by

two families; one by W. Roper, his wife, and seven children; the other by John Sparrow, his wife, and two children.

From the commencement of the fever in Pegg's house, they had kept quite close, declining all communication with the infected premises, and had hitherto escaped. It struck me that if I could remove the two healthy families, and isolate them, I should, even if they did not escape, destroy the focus of contagion, and thus probably cut off the disease. I therefore waited upon the Board of Guardians, and laid the case before them. There was some difficulty upon the subject, which was, however, eventually removed. The Union Fever Hospital, which is a detached building, was given up to them, and after some persuasion, the Ropers and Sparrows departed from the "city," which they left with all the regret of long attachment, and on the 23rd of November, took up their residence in the Fever Hospital of the Union, which is about three miles from the "city." The men were allowed to go to their work as usual. I confess that I felt interested in this experiment, and made frequent enquiries after the emigrants. I had no fresh case, and "all well" was the answer week after week which I received. I began to congratulate myself that there was an end of the epidemic, but I was disappointed.

Thirty-one days after their removal to the Fever Hospital, one of the sons of Roper was attacked with fever, and was followed by five other children in the course of the week; and on the 31st of December, one of the children of Sparrow, making then seven out of the thirteen. These cases fell under the care of another medical man, and all recovered. Their ages were 2, 4, 6, 7, 8, 10, 12, and they will number in my list, Cases 14 to 20, inclusive. They remained three months in the hospital.

January 17th.

Case 21.—On the 17th of January, 1847, fifty-five days after the Ropers had been removed to the Hospital, Samuel Gardener, residing at the cottage marked 21 in the diagram, was attacked with fever, had it very severely, having been reduced to the very last extremity, but ultimately recovered. *Samuel Gardener had worked with the Ropers daily before their removal to the Union*, and this is all the connection I could trace. None of the neigbours of Gardener had the disease, and this is the last case which occurred.

I have thus given a brief description of every case—the first and the last—in this, which I may fairly call a distinct (though limited,) epidemic, commencing on on the 25th of August, 1846, and ending on the 17th of January, 1847; lasting five months, arising without any traceable cause, and communicated from individual to individual, in eighteen certain and clear, and three other more doubtful, instances. It was confined to eight families, of whom it attacked in the case of—

Garrad	1	out of a family of	4	who recovered
Pegg	8	„	„	11 of whom all recovered
Threadgill	2	„	„	3 of whom one died
Roper	6	„	„	9 of whom all recovered
Sparrow	1	„	„	4 who recovered
Steggall	1	„	„	5 who recovered
Davy	1	„	„	7 who recovered
Gardener	1	„	„	5 who recovered

There are several points in the history of the epidemic which are extremely interesting:—

First. The effect of contagion,—*i. e.*, of a morbific poison, produced in, and exhaled from the human body, causing the same disease in others by direct communication, is distinctly clear.

Secondly. The fact observed in all fevers, and well-established in regard to many other diseases,—viz., that a certain state of the system, at present unknown and undefined, is essential to the reception of this contagious principle, was well shown in the epidemic I have described. In eight families, the members of which were in daily, and some of them in hourly communication with the party infected with this highly contagious fever, twenty-seven out of forty-eight escaped.

Thirdly.—The interesting fact of the poison of fever remaining dormant in the system for a fortnight (Case 11,) one month (Roper and Sparrow,) or even two months, (Gardener,) causing no alteration in the health, until the state of the system was favourable to the development of fever, is clearly and unanswerably demonstrated in the facts I have related.

Fourthly.—The *probability* of contagion being effected through the medium of a third party, who himself never has fever, is strongly indicated in Case 13.

I could extend these observations, but I have already occupied space enough, and I am anxious to avoid detracting from any value which may attach itself to the facts I have related, by being tempted into the fascination of theoretical speculation.

One word more, however, upon the all-important subject of treatment. Several (I think about nine,) years ago, I had nearly the whole management of an epidemic similar to that which I have related, and occurring in the same parish. In this case the symptoms commenced with a type which *appeared* sufficiently inflammatory to warrant the abstraction of blood, which in three or four instances was done by myself, and one or two by other practitioners; but every case in which blood was taken, either generally or locally, *died*. In fifty-four cases there were ten deaths, or about one in five. In the epidemic I have just related, in twenty-one cases there was only one death—one in twenty-one—a difference very great. Of late years I have used the lancet very sparingly indeed in the treatment of all diseases, except those purely and acutely inflammatory; but I have never taken a drop of blood from a patient labouring under

continued fever, and I have had no reason to regret the omission.

In the instances above related, I kept two indications before me:—

1st. To obviate *the effects* of local congestion, of what I believe to be in fever *altered* blood; *which effects*, again, I believe we see in or *about* the capillary system, or ulceration of Peyer's glands, &c.; and,

2nd. To prevent my patients from dying by asthenia; to keep them, in fact, alive.

The first indication I attempted to fulfil by the use of the Pulvis Sodæ Comp. of Guy's Hospital, a most useful medicine in these cases. It is composed of carbonate of soda, compound chalk powder, and calomel; sixteen grains contain one grain of calomel. Of this I gave from five to twelve grains every four hours, with or without a solution of the carbonates of soda and ammonia.

The second indication I endeavoured to fulfil by the administration of port-wine, with or without brandy, in large quantities.

In the cases I have detailed I had frequently abdominal and thoracic complications; in one case (11,) there was decided pneumonia, but I did not on this account omit the wine, though I pushed on the mercury. I was equally regardless of delirium, which is, probably, always an effect of innervation in these cases, or of dry tongue. Whenever I found unequivocal indications of debility, as evidenced by a quick, thready, irritable pulse; *trembling*; sordes about the mouth and teeth, &c., I invariably gave wine. The result of the cases I have related fully bears out the propriety of the practice. Had I been able to get more wine down the throat of poor Ann Threadgill, (No. 10,) I believe that I should have had no fatal case to record.

The doctrine of contagion in fever is all-important in these days of sanitary reform; every addition to our knowledge, therefore, upon the subject, is valuable. Dr. Watson,* in his usual masterly manner, has brought much evidence and reasoning to bear upon the subject. He believes that malaria or miasmata produce a disease which is not contagious, and that continued fever, and the exanthemata are never caused by malaria, but are invariably produced by contagion,—*i.e.*, by an animal poison arising in the individual, and propagated from one person to another, either by actual contact, or by exhalations from the lungs or surface of the body. But this argument, it is clear, must in itself extend to animal excretions, and what is undoubtedly true of the body, may thus, *mutatis mutandis*, be equally applicable to the dunghill or the neglected privy. Dr. Watson says, having established the proof of contagion, it is difficult to imagine any other way of propagation. Granting that the difficulty is great as a mere mental effort, with respect to the malaria of ague producing continued fever, it vanishes altogether when brought to bear upon putrid animal excreta, and this perhaps is the most natural theory we can devise to account for those cases in which no contagion can be traced.

Stowmarket, November 24, 1847.

* Lectures, Vol. I., "Malaria;" and Vol. II., "Continued fever."

SHORT NOTES OF THE OPINIONS AND PRACTICE OF THE LATE JOHN PEARSON, ESQ., F.R.S., ON SYPHILITIC DISEASE.

By W. S. Oke, M.D., Physician to the Royal South Hants Infirmary.

(*Continued from page* 654.)

When chancre is associated with phymosis, it sometimes ulcerates backwards as far as the arch of the pubes; at others it penetrates laterally into the canal of the urethra, causing the urine to communicate with the sore, and producing excruciating pain.

So long as the urine is imperfectly discharged, the ulceration of the integuments will continue to extend, and the pus and urine pass out together through one or more openings.

Sometimes in *complete* phymosis, ulceration takes place through the prepuce at the point where the corpora cavernosa join the glans, and the urine, having no other outlet, will be forced upwards at a right angle with the urethra, producing the greatest possible annoyance to the patient. If the chancre, having perforated the urethra, has formed a sinus, making its way towards the scrotum, the urine will escape into the cellular membrane, and produce great pain and inflammation, and in a few instances affect the testicle. When the sinus is narrow, and the aperture small, the inflammation will extend, and form a small hard tumour near the ossa pubis, the superincumbent integuments not always being involved. In these cases the urine will be expelled by squirts; and if the tumour be neglected, the sinus will proceed downwards in the course of the urethra, and produce fistula in perinæo. In another instance, when the glans has been destroyed, the ulceration will extend along the corpus spongiosum, and cause the greater part of it to slough away, whilst the integuments may remain unaffected; but the sound skin will so contract upon the space left by the sloughing of the urethra, that the urine will be expelled in a stream not larger than a hair, and a bulbous enlargement will be found behind the point of contraction, by every effort to discharge it. There is generally at the same time thickening and induration of the prepuce, with a contraction of its aperture. Should the ulceration include the common integuments, these, as well as the corpus spongiosum, will be destroyed, and the urine will be discharged through a small aperture near the pubes, at the anterior part of the scrotum, whilst the corpora cavernosa might probably remain entire.

Chancres in the female are usually situated on the inner surface of the labia, on the nymphæ, or the vestibulum, more rarely on the præputium clitoridis and margin of the meatus urinæ. Those on the outer surface of the labia have generally a crust formed upon them in consequence of their exposed situation. They are seldom, if ever, seen primarily in the vagina. In sixty-three women, thirty had primary sores on the inner surface of the labia; twenty-seven on the vestibulum; one on the anterior perinæum; and five on the nymphæ and præputium.

In many cases the primary sore is solitary, but three or four are oftener found in women than in men. This may arise from delay in procuring advice; for where early application is made, there is seldom found more than one. Considerable pain, inflammation, and tumefaction of the labia frequently attend these ulcers, which enlarge and become very fœtid. Large sores on these parts often become sloughy and gangrenous, and it is not uncommon for the whole of the external parts, with part of the vagina, to slough away; indeed it sometimes happens that the body of the uterus is exposed, and the rectum lies loose in the ulcer.

As a result of these deplorable cases, the cavity of the vagina will be sometimes almost obliterated, and only a space left just large enough to permit the exit of the urine. The lowest class of prostitutes are most subjected to these severe ravages, from their inattention, intemperance, poor diet, and frequent exposure to the inclemencies of the weather.

Independently of the magnitude of syphilitic sores, a sore of a peculiar kind is sometimes formed at the lower and external parts of the labium, or on the anterior perinæum. This kind of sore frequently sloughs, and spreads towards the anus, having hard, but not thick, edges, and the discharge from it approaches the nature of sanies. The patient is very weak and irritable, and the sore is aggravated by the use of mercury, and often becomes gangrenous. It is probable this species of ulcer is caused by the syphilitic matter coming in contact with an abraded surface, or a pustule. It is a sign of a broken down constitution, and often proves fatal. Sometimes a troublesome discharge from the vagina remains, after syphilitic sores on the labia and nymphæ have yielded to mercury, which cannot easily be restrained by ordinary means; and sometimes it is almost impossible to remove the indurated swelling that is caused by them. If it be on the nymphæ or clitoris, excision may be employed, but such a practice is justifiable only when it impedes locomotion, or interferes with the functions of the rectum or bladder.

It is singular that the venereal virus seldom produces more than one or two primary sores, although so large a surface is exposed to infection; and if exposure to infection produces disease in so limited an extent, we are not to be surprised that the matter discharged from such sore shall not always produce other sores *sui generis*.

When more chancres than one appear at the same time, they probably arise from the same source simultaneously, and it is certain that more than one may appear. This, however, is an exception to the rule.

Treatment of Gangrenous Syphilitic Sores.—When a syphilitic sore is gangrenous, the first object is to check the gangrene, and promote a separation of the slough, before any attempt is made to treat it as a specific case; it will therefore be best to poultice the part, and give bark, acids, &c. If the sore be out of sight, a decoction of poppies should be injected to wash out the sordes. Opium must be given, but it will not be advisable to give much wine. In seven or eight days probably the slough will separate; and it will be judicious to wait till the granulations are rising, and the venereal action becomes evident, before mercury is given. After the complete separation of the slough, the syphilitic action is characterized by a foul appearance of the sore, and by its elevated edges. It ought now to be treated as syphilitic, and the bark, &c. should be discontinued.

Although this may be considered as a general rule, it has nevertheless its exceptions. Sometimes, notwithstanding the use of bark, opium, and good living, the gangrene spreads, the pain becomes more severe, and the patient's health declines. In such a case the syphilitic virus is to be considered the immediate cause of the mortification, and mercury is to be given freely with the other remedies, which will frequently be attended with success.

[When extensive gangrene has taken place, and is rapidly increasing, the case is attended with the deepest anxiety, both to the patient and surgeon; and it is not at all times easy to decide what treatment ought to be adopted, whether to give mercury freely, or none at all. I venture to make the following brief remarks on this interesting point:—

1st. If the gangrene has taken place under the use of mercury, its immediate discontinuance, and the use of tonics, with a generous diet, are clearly indicated.

2nd. If previously to infection there existed a delicate, weak, or cachectic condition of the constitution, even if no mercury had been used, the case should be treated with tonics, especially the iodide of potassium, opium, and a generous diet. But—

3rd. If the primary sore quickly followed exposure, spread rapidly, with pain and inflammation, and soon became gangrenous, and if the general health had been previously unimpaired, then the destruction of the parts may be fairly referred to the intensity of the virus, and the free use of mercury at once employed.]

Where there is a sloughing sore with phymosis, and hæmorrhage takes place, if the prepuce cannot be retracted, it must be divided, although in such a state of the parts such a step is most undesirable. If the

bleeding be not very considerable, other means may be previously tried, such as the injection of warm porter or wine between the prepuce and glans.

The hæmorrhage generally springs from the glans penis, and although its texture, even in a healthy state, is scarcely fit for the needle, and of course is much less so in a state of disease; it will be, nevertheless, right, if profuse bleeding continue, to make the attempt to stop it by such means, taking care to include a portion of the surrounding parts in the ligature. If this method should not succeed, the bleeding vessel may be compressed by the hand of an assistant as long as it may be necessary, with a bit of sponge or puff-ball, or a little bag, containing some powdered sulphate of copper; and should these means fail, turpentine, boiled over a candle in a spoon, may be poured upon the part from which the blood issues; or the actual cautery, all other remedies proving of no avail, may be applied.

In order to make use of these more severe methods, the prepuce of course will have been divided. At first it is best to make the division by a single longitudinal incision, in order to liberate the parts, and to finish the operation after the sloughing process shall have ceased.

If mercury be found to aggravate the local disease, it must be discontinued, for it will be better that the system should continue under the influence of the syphilitic poison, than that the organs of generation be destroyed, and the general health impaired, by means of mercury.

Treatment of Primary Syphilitic Sores in Women.—When chancres are accompanied by much pain and inflammation, they may be washed with a lotion of calomel and lime-water, or with the Aqua Phagedænica of the old Pharmacopœia. [Aqua Phagedænica is commonly called the "yellow wash," made by mixing two grains of the bichloride of mercury with a fluid ounce of lime-water.] By these means they will generally be found to heal rapidly; but if the sores be very large, they may be dressed with the mercurial cerate.

Where the inflammation and tumefaction of the labia and nymphæ are so great as to confine the patient to her bed, poultices, as well as the dressings above-mentioned, are to be applied; and if gangrene has taken place, the stale-beer poultice may be used, together with the internal use of bark, mineral acids, &c.

As the result of syphilitic sores, there will sometimes be considerable enlargement and induration of the nymphæ; and if this state of the parts should not have been reduced by a full mercurial course, by poultices, the vapour of hot vinegar-and-water, or spirit of wine, nymphotomy may be performed.

The operation may be done in the following manner:—Let the incision be commenced with the scalpel at the superior part of the nymphæ, and carried downwards till within a quarter of an inch from the bottom, at which point it should be terminated laterally. By this method the principal artery of the nymphæ will be avoided; but when there is much enlargement, it will be sometimes necessary to secure the bleeding vessels.

The subsequent dressing may consist of dry lint, a pledget of lint, and a T bandage. The patient is to be kept low and an opiate administered. After twenty-four hours a poultice may be applied. The sore will usually heal in about ten or fourteen days.

Excision may be also adopted, if the præputium clitoridis is very much enlarged and indurated; but such a mode of treatment is seldom necessary.

There is no specific mode of treating the sphacelating constitutional sore above mentioned; there is generally quick and feeble pulse, but the patient does not suffer in any very great degree. Bark and mineral acids, with a nutritious diet, is the most suitable treatment; and the best local applications will be those that give the least pain; a solution of the nitrate of silver will be attended with advantage.

(To be continued.)

STRANGULATED HERNIA ON ITS PROPER FOOTING.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I have written often on this subject, in expectation that my views would prevail generally; in this I am disappointed, therefore wish to explain still further, aware that human suffering and life are involved in the discussion. The theory and practice adopted generally, as appears by the writing and teaching of eminent men during the last century to the present day, are,—that strangulation consists in displacement of the hernia, and that replacement is the remedy. The protruded part is represented as if bound by a cord, and the practice is to push it back until returned into the abdomen, to press it towards the aperture, sometimes to grasp it with the hands; also to try with the fingers of one hand at the top, to get in a small portion, whilst with the other to raise from the bottom by various movements, and return the remainder. It is a common practice to knead it as flour is worked into dough; in most cases many hands are thus employed. One treatise, which is valued, advises perseverance for an hour in these attempts.

I have always considered the theory and practice as here laid down, erroneous. When we reflect that the part is very often protruded, among the working classes, and remains so many days, it is evident that situation outside is not the cause, and consequently, to return it is not the remedy. With respect to the practice, it is outraging every sound principle to grasp an inflamed and inflated intestine, and to push it back forcibly against a stiff tendinous border, which binds it as stated. The aperture had been always filled up by the spermatic process, the hernia being added and unable to expand, the intestinal tube is closed up unavoidably in the ring. Surely the attendant irritation forbids such attempts as to press portion by portion; also as

kneading to get up a part. The neck formed by the hernia as if solid, is immovably fixed, so as to present to a discerning eye, insuperable objections to all manipulations at this stage; the too narrow space wedging together what had presented two tubes, now inseparable, on account of the resisting ring. Cases of success have sometimes occurred during the movements stated, and also when none had been resorted to; these have happened when the symptoms were mild and gentleness had been attended to. The removal of strangulation where no effort had been made, strongly encourages forbearance as to handling; the spontaneous removal is in coincidence with our views of all inflammation of the viscera. The fact that any formidable ailment, for which much force had been the usual remedy with eminent men, shall be remedied without any other means in lieu of it, is most instructive. The surgeon who practices kneading must forget the firm state already observed upon, and that the integuments alone can be moved, which latter yielding, imparts the feel that deceives: it is quite incompatible with the corded state allowed by all, that movements of any kind could be effected. Surely the spermatic cord and enclosed intestine are by far too much for the space, and too sensitive not to suffer severe injury through such practice; fortunately the integuments interfere, and are protective in some measure.

Presuming that the reasoning advanced, shews sufficiently that return of the hernia into the cavity is not the suitable remedy, and also that the treatment at the beginning is injurious in every case, ultimate measures of improvement are to be considered.

The first feature strangulation presents is a swollen intestine, *ex situ*, painful in the extreme at the aperture where it is obstructed as to its passage inside and outside; it is also impervious here, impeding the circulation of its contents, which being acrid in a high degree, irritate and distend. It is clear that imperviousness at this precise spot must be removed, so that the contents may circulate as in health. This is the remedy in my view, which is supported powerfully by the occurrence of a gurgling noise always accompanying the removal of strangulation; this noise arises from the air rushing through and opening the intestine at the desired spot, leaving it free, and the bulk disappearing. The celebrated Pott remarked this noise, but drew no inference from it; had he dwelt on the occurrence as it invited, a rational practice would have been settled on ere this, instead of the farrago which has so long darkened our course.

In the opinion that the last points to which I have adverted furnish a clue to success, I shall describe my practice so as to carry out my views. I avoid the taxis or touching the part, and place the patient in a cool situation, often on the floor, the trunk being bent by raising the head and knees; wetted cloths are kept on the part, the cold being renewed every five minutes. The air is admitted by open doors and windows, which often causes a rigor and sudden disappearance of the hernia; if not, I apply my hands to the sides near to the upper part, and gently press them towards each other to lessen the area; thus a stream of the contents is impelled towards the impervious tube, where it dissevers the closed coats. This is enough, the gaseous nature of the fluid struggling for vent. This is the only handling I use, and it has always succeeded when resorted to in the first instance. Water, ice, &c., have often failed when accompanied by the *taxis* in the usual way, which is a certain counteractive of all means. It is quite clear that after the sensibility has been lessened, gentle pressure is safe, whilst during the interim it is not so. In failure of these means I operate, making a small incision in the tendon to allow the gut to expand where it is closed; having no view to returning the hernia during the tumefaction, I gently endeavour to remove the contents, assured that this is a *sine qua non*.

A case in extremis occurred at a London Hospital, after failure of the usual means. The patient, rather undressed, was carried across the yard to the room for operating, on a cold day. The strangulation vanished in transitu, which was discovered on exposure on the operating table. This was witnessed by Mr. Lawrence, junior, a student of high character. It calls to my recollection two cases in which I could not attend at the time, but had instructed the messengers to treat the cases as already detailed. On my arrival after half an hour, I was informed that a shivering fit had seized them, and the strangulation vanished suddenly. In the course of thirty years I have treated two or three on an average annually, and when in the early stage, successfully.

In December, 1829, I met two well-qualified surgeons prepared to operate promptly, because the touch gave excessive pain; on my applying cold water for about a dozen minutes, the sensibility was so far abated, that I applied my hand outside the folds of wet linen, gave no pain, and removed the contents in the presence of the gentlemen who had decided that the knife was the only remedy.

I was present at the operation, by an experienced surgeon, who, before and during the process, and twice incising the tendons, failed to return the inflated hernia; he raised himself on his toes, and drove the part before him. In another case I interfered, and advised a trial to reduce the size, (pending the operation,) which was declined, and the usual practice persevered in. Both cases proved fatal.

Instances of the like description are recorded, in which dissection shewed the part impervious, where the gut and tendon had been in contact. A case is reported in the *London Medical Repository* for November, 1825, in which the operation had been performed, and gut returned, but was followed by intense pain, and death. Dissection shewed the part that had been fixed within the aperture during strangulation impervious and solid, for one inch and a half in length. The operation was perfomed by Dr. Bishop, of Thornley, Northamptonshire, who took the portion to London, where Brodie, Cooper, and others saw it with great surprise, but observed that Mr. Geoghegan had anticipated such an affection, in an essay on hernia, but produced no *post-mortem* facts in proof of his statement.*

In conclusion, I beg to call the attention more closely

* Surely *success* must ever prevent an opportunity of producing a *post-mortem* fact.

and minutely to the aperture, where a sufficient cause of obliteration is manifest; carelessness, in this particular, I fear, has led to misrepresentation, and been the cause of those errors on which I have presumed to comment. There is reason to apprehend, that in transferring accounts of practice from the works of ancient practitioners, inaccuracies have taken place, and routine has misled many men of talent. To clear away obscurities which still invite inquiry, I fear that I have fallen into tedious circumlocution; but understanding that there have been many fatal cases in France, and in our empire, and finding through the press that the taxis, as a first step, is in universal use, I am anxious still further to interfere, in the belief that fatality in cases of strangulation will very seldom occur when my plan of treatment is adopted in the first instance. It has been very successful at the Brighton Infirmary during many years. Desault, whose abilities were of the highest order, forbade altogether handling the hernia, aware of its hurtful effects, as usually practiced. Peter Lowe, who was coeval with the celebrated Sharp, proposed puncturing with needles to discharge the flatus; and lately, Dr. Weatherhead invented a small trocar, of which there is a plate in the *Lancet*, of 1829, for the same purpose, both being satisfied of the necessity for removing the bulk. Haller remarked that he knew not how strangulation took place. Pott, who devoted so much labour to the question, made the same observation. My conjecture, published in a pamphlet, in 1810, was, that the sensitive intestine doubled in rushing through the aperture, was crushed against its tense border, and closed under the irritation; thus return of the contents was impeded, a sufficient cause of all the symptoms. Qualified surgeons know that the success of almost every operation depends *mainly* on the previous state of the patient's health, independently of the present ailment; every measure, therefore, which promises to effect our object without operation should be resorted to, whilst the utmost caution should be observed to prevent the practice hitherto always recommended and pursued. Were I not supported by the authority of Desault, I feel assured that the reasons I have advanced will satisfy all who patiently examine them. It is of importance to ruptured persons to be capable of assisting themselves when suddenly attacked, and the rather, as the means are simple and not dangerous. Although sufficient knowledge may be deduced from the preceding statements, it may be useful to re-state how important it is to relax the trunk, by raising the head, &c., and drawing up the limbs, leaving the body in a passive state during about twenty minutes, or a shivering fit; then to use the hand as before recommended, independently of the latter affection. Careful observations by myself, and the experience of others to whom I have referred, assure me, that if the treatment I oppose is abandoned, whilst strict attention is bestowed on the order and means which I propose, strangulated hernia will lose its terrors, and in almost every case terminate successfully.

A RETIRED SURGEON OF THE IRISH COLLEGE.

Brighton, October, 1847.

CASE OF RIGIDITY OF THE OS UTERI, TREATED BY INCISION OF THE CERVIX UTERI.

By Thomas Barrett, M.R.C.S., Bath.

(Read at the Annual Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association.)

It must have fallen to the lot of every practitioner in midwifery to have met with cases where the rigid state of the os uteri has impeded labour, till the life of the patient has been endangered from the consequent exhaustion and long continued pressure. That in a large majority of cases this rigidity will ultimately yield to the usual remedies of artificial dilatation, bleeding, opium, &c., there is no doubt; but it is equally certain that cases have occurred, where the rigidity has been too persistent to allow the passage of the child, and labour has been only terminated by extensive laceration, or the separation of the cervix, probably in a state of gangerene, from the long continued pressure on its vessels. The treatment by incision of the os uteri, though some time before the profession, has, I think, been little practised by them. The successful termination of a case which recently fell under my observation has assured me of the value and comparative safety of this treatment.

The patient was in her fortieth year, and in labour with her first child. I saw her first on Wednesday morning, June 1st; labour had commenced on the day previously; the pains were slight, but pretty urgent; the os uteri just sufficiently dilated to admit the top of the finger, was very high up, directed backwards, very rigid, and thick. On Thursday I found the pains more severe, but the condition of the os unchanged; the liquor amnii had been discharged, and the head presented; the skin was cool, and pulse quiet. A dose of castor oil, with fifty drops of tincture of opium was given; free action of the bowels, but no sleep followed. The next twenty hours produced little change in the symptoms; the pains were more severe, but the state of the os uteri was unchanged; it still would but admit the point of the finger through its thick and almost cartilaginous ring; the head pressed firmly on the anterior part of the cervix; the pulse was full and sharp; she had not slept for forty-eight hours. I bled her to twelve ounces, gave her a grain and a half of opium, and administered an enema. She slept a few hours after the bleeding. Early on Saturday morning the pains returned very powerfully; the os uteri had lost a little of its thickness, but none of its hardness; it was still tilted high up against the promontory of the sacrum, but was dilated to about the size of a shilling piece. The woman had had anasarca of the lower extremities to a great extent, for six or eight of the latter weeks of pregnancy, and the labia and external parts in general were very œdematous; the vagina was hot and dry. I again bled her, the blood being buffed and cupped, gave another injection of castor oil and turpentine, which freely emptied the bowels, and directed constant steaming with hot water to the pudenda. Violent pains continued throughout the day; the condition of the os remained unchanged;

but the head was lower down at each pain, the cervix being forcibly stretched over it.

At this period my friend, Dr. Samuel Edwards, saw her with me; there was some tenderness of the abdomen; skin was hot; pulse sharp and full, and about 100. At his suggestion she was again bled, and put under complete nauseation with tartar emetic; afterwards a full dose of opium, and another emollient enema were given; the os uteri and cervix were freely smeared with extract of belladonna. The pulse fell to 90; the pains became suspended for many hours, during which time she occasionally slept, and felt comfortable and easy.

On Monday morning, June 6th, the pains (forcibly expulsory) again recurred. An examination, however, shewed no other change in the state of the os uteri, than that it was a little thinner; it was not more dilated, and still felt almost like a bony ring, and resisted, as it had all along done, any attempt at artificial dilatation. Towards night considerable constitutional disturbance set in; the pulse was 110; skin dry and hot; tongue rather brown; the abdomen tender; vagina hot and dry; and the system generally irritable.

It must be admitted that the state of the patient at this time was one calculated to excite considerable anxiety. She had been in labour for five days, but the state of the os uteri opposed completely, as it did in the first day of the labour, the possibility of the birth of the child. The usual remedies sedulously applied, and anxiously watched, had exercised no influence in overcoming the difficulty; and though till this time the constitutional symptoms had caused no uneasiness, still now they began to show themselves in such a form as to urge the necessity of the adoption of some measure by which the labour might be terminated; the pains too, were violent and forcing, and the head was so forcibly pressed against the thin and widely-stretched cervix, that I dreaded with each pain, some fearful laceration. At this time the child was living; but even had it been dead, to have practised embryotomy through such an undilated and undilatable os uteri would have been as difficult to the operator as dangerous to the mother.

It was in this state that Dr. Edwards proposed an incision of the edge of the os uteri, and though my own experience taught me nothing of the practice, my confidence in his judgment removed any doubts I may have entertained of its desirableness. The operation was performed in the manner detailed by Dr. Lever, in a similar case published by him. The knife used was a probe-pointed bistoury, and the two incisions were made each side the mouth of the womb. The patient complained of no pain; some bleeding followed the division. In two hours the constitutional symptoms were materially relieved; the pulse was at 90, and the skin cool; abdomen less tender, and irritability calmed.

An examination four hours after the operation showed but little change in the state of the os, but after a time it began slowly but certainly to dilate, and at eleven o'clock in the forenoon of Tuesday, (the seventh day of labour,) its disc was rather larger than half-a-crown. The corrugated state of the scalp, the disappearance of the caput succedaneum, and the still more conclusive evidence afforded by the stethoscope, showed the death of the child, and we determined upon performing craniotomy. The os continued gradually to yield to the diminished bulk of the head, which each pain forced against it, and the remainder of the labour went on steadily progressing, the pains continuing regular and patient comfortable, till eleven o'clock p. m., when she gave birth to a female child of the average size. The placenta was expelled in about twenty minutes. No one single unfavourable symptom followed to interfere with her speedy and perfect recovery.

40, St. James's Square, Bath.

CASES FROM PRIVATE PRACTICE.

By John Richard Wardell, M.D., Edin.;

Late President of the Royal Physical and Hunterian Medical Societies, Assistant Pathologist in the Royal Infirmary, Edinburgh, &c. &c.

(*Continued from page* 661.)

The time intervening between the swallowing of the poison and its effects becoming apparent has been known to vary considerably, and very much depends upon whether a solid or a liquid have been taken, the former of course requiring a longer period than the latter, that is until the drug becomes reduced to a solvent state. Poisoning by laudanum is always more speedy than by opium. In this case it is seen the symptoms supervened in the course of a few minutes, which was unusually quick; in an instance which is now recollected that occurred in Edinburgh, the effect came on in from twenty minutes to half an hour. It is often from half an hour to an hour before very marked indications are present.

The period at which death generally takes place, differs under apparently like circumstances, but is most frequently from ten to twelve hours; in the case referred to in the northern metropolis, the patient, a woman, died in about four hours and a half, and there is every reason to suppose that the instance which has called forth these imperfect remarks, inferring from the fearful degree of collapse into which she was thrown, would, had not the proper expedients been had recourse to, have perished in a shorter time still. The poison always kills the young with more rapidity than the adult, owing to the greater sensibility of the sensorial functions, and the more speedy and grave manner in which a return is made upon the vital organs.

Regarding the quantity requisite to destroy life, so far as my own researches have discovered from the various authorities on this subject, the dose taken by this girl, and by which there is every reason to suppose she would have been killed, if she had been left to the effects of the poison, is the smallest quantity to be followed by such grave results which I can find recorded. Certainly not more than one hundred drops had

been taken. The mistress of the house had the half-ounce vial in her possession, and, as stated in the case, not quite one half had disappeared; and when it is considered that a few drops had been used by herself for the tooth-ache, this would certainly be the utmost quantity. On calling for the bottle at the next visit, she had unfortunately destroyed it, which is the reason that the portion taken is not now exactly mentioned. "The smallest fatal dose of the tincture in an adult which I have found recorded," says Mr. Taylor, "is two drachms. This case is reported by Mr. Skae, in the *Edinburgh Medical and Surgical Journal*, for July, 1840. The patient was a robust man, aged fifty-six. He swallowed the tincture at ten in the evening, and died under the usual symptoms on the following morning, the case thus lasting only twelve hours."*

There are certain idiosyncracies which it is impossible for human wisdom to foretel, where death is produced with that which to another would be but an innocuous, or even an effectless dose; for instance, in the example of Martha C——, mentioned in the remarks on the two cases of spasma glottidis. That patient under spasmodic disease, took with impunity, or indeed without producing much impression of any description, a quantity of opiates under which this girl would inevitably have perished.

In this case, where vomiting supervened so immediately after the poison had been swallowed, the amount retained, and which was followed by such grave consequences, must needs have been very small indeed, and when reflected upon, in a medico-legal point of view, becomes of some interest. No other bottle could be found containing poison; and from enquiries made at the shops, it was pretty evident that she had not procured more than that in the aforsaid half-ounce vial; besides, in her subsequent confession, all other parts of her story were found to be correct. She stated that she had placed the vial in a glass on the shelf in the bar,—there the bottle was discovered; that she had taken it in rum,—the odour of that spirit had previously been distinctly recognized; other unimportant details were also substantiated, it is therefore fair to infer that the whole of her statements were true, and thus the conclusion, with regard to the quantity swallowed, is a correct one. There would have been no utility in, nor likelihood of, her telling one part of her tale truly, and the other false, and especially regarding to her, an unimportant particular. People when they equivocate, and speciously depose evidence, always have some ulterior object in view,—some point to be gained: here there could be none.

It may not perhaps here be considered out of place to give a few particulars relative to the case above alluded to, and that occurred in the north. It was in the person of a plethoric young woman, of apparently five or six and twenty years of age. When brought into the waiting room of the hospital, she was deeply comatose, and though there were then no proofs beyond the symptoms, it was evident she was in a state of poisoning. It appeared from subsequent inquiries that she had gone into a dram-shop, called for some whisky, and unobservedly added the fatal potion. In no great length of time she dropped into a deep sleep, and then helplessly fell from her seat. The pupils were contracted, face livid, pulse slow, skin cool, breathing laborious and somewhat stertorous. On raising an arm or a leg it fell listlessly into its former position, in all the passivensss of unconscious prostration. Without loss of time I introduced the stomach-pump, and threw in most of a quart of tepid water, which was immediately pumped out again, and thus the process was repeated to the third time, by which means the organ was thoroughly laved out, and such noxious matters as remained extracted. She was then placed in a warmed bed, (being too much prostrated to be walked about,) and for three hours I tried every remedy that might be deemed of service, but without avail, as she died, as before stated, in about four hours and a half after having taken the mortal draught.

When making an examination of the body, I recollect that Dr. Craigie was standing by me in the pathological theatre, and he observed to me before removing the viscera, that but seldom were the morbid appearances in these cases of real importance, and it often happened that little or no diseased changes were manifest, at least such as seemed fully to account for the fatal termination. Dr. Craigie had witnessed the autopsies of many cases of poisoning by opiates, and such was the result of what he had noticed.

On removing the calvarium considerable vascular turgidity was most obviously apparent, the superficial vessels being dark, tortuous, and distended with venoid-looking blood. Exposing the centrum ovale, numerous bloody puncta were demonstrated, and in fine, the whole encephalic mass was considerably engorged. There was not much serum infiltrated into the ventricular cavities, which probably was dependent upon the short period in which death had been induced; in cases where they linger on from twelve to twenty hours, serous exudation is more commonly observed. The lungs were quite anormal in their characteristics, being intensely surcharged with dark venoid blood, and the right ventricle of the heart was loaded with a gory semifluid mass. The stomach presented no traces whatever of disease.

These are, I believe, the most frequent morbid appearances, and sometimes sanguineous extravasation is found, resulting, of course, from the encephalic vascular obstruction which is induced. "The principal morbid appearances," says Dr. Traill, "are great turgescence of the vessels of the brain, and sometimes serous effusion between its membranes, or in its ventricles; but sometimes no morbid appearance can be detected in

* Taylor's "Manual of Medical Jurisprudence," page 221.

the head; the lungs are gorged with blood; the stomach rarely appears inflamed; the blood is found fluid in the heart, and the body runs rapidly to decay."* "The stomach and intestines," says Mr. A. S. Taylor, "present no unnatural changes. There is greater or less fulness of the cerebral vessels, but even this is often so slight as to escape notice unless attention be particularly directed to the brain."† Again, that author says, "In a case which proved fatal in fifteen hours, examined at Guy's Hospital, a few years since, the vessels of the head were found unusually turgid throughout; on the surface of the anterior part of the left hemisphere there was an ecchymosis, apparently produced by the effusion of a few drops of blood; there were numerous bloody points on the cut surface of the brain; there was no serum collected in the ventricles; the stomach was quite healthy. This may be taken as a fair example of the *post-mortem* appearances in poisoning by opium."‡

Comparing the accounts given by these authors, as to the lesions discoverable in poisoning by narcotics, with the particulars respecting the inspection made by myself, the reader at once perceives that they very much resemble each other, and doubtless the conclusions arrived at by these two eminent medico-legalists, are mainly right, and as a general view, are in accordance with facts. It seems rather surprising that the latter should have passed over a condition which is perhaps quite as often present as the vascularity of the brain,—viz., the pulmonary engorgement which is there so frequently detected. Dr. Traill very properly notices this lesion in his enumeration of the chief appearances.

Returning to the case of Ann H———, so sudden was the operation of the poison, that when I saw her, certainly not more than half an hour afterwards, she was so prostrated that it would have been quite impossible to make her walk about; and Mr. Cole, who saw the patient a few minutes before, affirmed the same, on which account the remedial measure of constantly keeping the body in action was not attempted. The line of treatment, it will be seen, was such as is generally had recourse to in these instances, consisting in keeping up, as much as possible, the circulation, and never allowing the patient to sink into repose. For some time the efforts threatened to be inoperative, but ultimately the lividity became less apparent, the surface warmer, the countenance more natural, when incoherent murmurs were elicited, and at the expiration of two or three hours she was considered beyond danger.

As all rational systems of treatment should as much as possible be founded upon the observation of, and the inferences deduced from, demonstrative facts, a review of the morbid appearances discovered in the case which occurred in the north, may perhaps tend to confirm us in our decision in what such most properly consist, and especially if some of those late physiological discoveries which have been made are at the same time remembered. If we are to regard the nervous system as having three distinct functions, or as being divisible into three other systems,—the vital, sensorial, and muscular, properly so called,—we can then more correctly account for the manner in which death is proximately induced, and decide better as to the way in which the fatal termination is most likely to be averted. The sensorial functions being affected, whatever impressions are made upon these, are in an exact ratio to the sum of such impressions transmitted to the other two functions,—viz., the muscular and vital; when, therefore, from whatever cause, the sensorium is rendered unequal to the due exercise of its functions, as by a direct loss of sensorial power, which an agent like the one now spoken of is capable of producing, the two other functions are not efficiently performed—are carried on anormally, and their action, through such morbid impression, deteriorated by the agent in question, may be entirely suspended, and of course, death ensue. Eminent physiologists in this and other countries have shewn that respiration is caused by, and under the immediate influence of, three distinct functions,—the sensorial, vital, and muscular functions: that it is a compound and voluntary action. Now, when the sensorium is affected, sensibility diminished or destroyed, the function of respiration becomes commensurately disordered or wholly ceases, because this action cannot be carried on without the stimulus of the sensorial functions, the respiratory muscles otherwise cease to act, and the vital functions, properly so called, also cease. Respiration being a voluntary act, the loss of sensation is also followed by the loss of pain, and when the sensation of pain no longer obtains in our bodies, the respiratory muscles, as said, no longer are urged to their natural exercise; hence congestion in the vital organs, and if continued, death, The brain, spinal marrow, and lungs especially, become overloaded, and thus they then also superadd to the deleterious states already noxiously existent in the system. The capillaries fail to normally propel their contents unless stimulated by arterial fluid, which appears from the philosophical investigations of M. le Gallois, Wilson Philip, and certain other experimentalists, to be their proper and only stimulus; therefore when the blood is no longer duly arterialized, congestion must result in the vital organs, from the cause now given. The nervous influence so necessary to all the vital processes of our bodies, and which is the proper and indispensable stimulant of the vital organs, properly so called, cannot be generated by, or eliminated from, the central organs of the nervous system, unless these organs are unaffected in their functions; but when they receive a morbid impression from the operation of some noxious agent, as a

* Traill's "Medical Jurisprudence," p, 132.
† Taylor's "Manual," p. 43. ‡ *Ibid*, p. 220.

narcotic poison for instance, the results as above enumerated ensue, and this agent, it is quite possible, may primarily act upon the vital and muscular, as we know it does upon the sensorial system.

From what has been advanced then, it is quite obvious that our endeavours should be zealously directed towards the maintenance of the sensorial functions, because we know of no antidote to this poison, and because the legitimate inferences of the views now stated, seem to demand such conclusions. The patient, whose body I examined in Edinburgh, undoubtedly died in part as from asphyxia, because it was related that the lungs were intensly congested, and there was præternatural vascularity and obstruction in the other vital organs. It has been ascertained by certain experimentalists, both in this and other countries, that the nervous influence is, in all its appreciable qualities, identical with, and its phenomena similar to, an agent in inanimate nature—viz., electricity; and that this agent, when applied to those organs whose office is the transmission of the nervous influence from the central organs of the nervous system, has the power of stimulating to their normal action those organs upon which life immediately depends, commonly called the vital organs, even when the sensorial functions are very evidently impaired; this, therefore, seems a proper remedial measure to be employed in cases like to this now particularly considered. A powerful narcotic, as observed, makes such a morbid impression upon the whole of the organs, constituting the nervous system, that their proper functions are gravely altered, and that stimulus—the nervous influence—is no longer secreted by, if such term may here be used, nor consequently transmitted for, the carrying on of the vital processes. If then, the heart and lungs can for a time be artificially carried on, or materially assisted by this agent from inanimate nature, that is, until the poison ceases to exert its pernicious effects, and the circulation thus continued, great hopes of recovery might thus be entertained, and doubtless some fatal terminations averted. The circulation might also be considerably assisted at the same time by means of artificial inspiration, and thus aiding the due aëration of the blood, when the capillaries would receive a greater quantity of their proper stimulus, and free the vital organs in their action. I am fully aware that both the former and the latter have been recommended, nor is there anything new in these remarks; the only design in making the previous desultory observations, is to shew that such remedial measures are founded more upon a rational basis than may be generally admitted, and if possible, where these cases occur, to strenuously recommend their adoption. In the Edinburgh hospital I remember an instance in which voltaic electricity was eminently serviceable. [Since this case was sent to the press, an excellent illustration that the correctness of the above-maintained doctrine is borne out by practice, is given in the number of this Journal for November 3rd, and which is quoted from the *Lancet*. On referring to this example, which occurred in the Middlesex hospital, the reader must be further convinced of the beneficial effects which in these instances result from the agent in question.]

In conclusion, relative to the case now given, the following facts may be reiterated:—1st. The symptoms supervened with unwonted suddenness. 2ndly. The quantity of laudanum really retained must have been very inconsiderable, rendering it surprising that such fearful symptoms should follow so small a portion of the poison. 3rdly. The spirit in which it was taken did not appear to exert the retarding influence ascribed to it by Christison and others. Lastly. The pupils were dilated, one more so than the other, which is contrary to what is by far most usually the case,—viz., their contraction.

(To be continued.)

PROVINCIAL
Medical & Surgical Journal.
WEDNESDAY, DECEMBER 15, 1847.

In our last number we introduced a proposal by Mr. Hunt, of Herne Bay, under the sanction of the Council of the Provincial Medical and Surgical Association, for an investigation into the "Medicinal Action and Effects of Arsenic." We now beg to invite the attention of the members of the Association to the inquiry proposed by Mr. Crompton, of Manchester. The notice to members in some late numbers of the Journal has already made the subject of this investigation—a Report on Burns and Scalds—intrusted by the Council to Mr. Crompton, sufficiently known. We proceed to insert a letter, addressed to the President, and the President of the Council of the Association, which contains a full exposition of the views of Mr. Crompton. This letter concludes with a series of questions, to which it is hoped that the members of the Association will severally return such answers as their knowledge and experience may enable them to do.

A LETTER TO

JAMES HEYGATE, M.D., F.R.S.,

President of the Provincial Medical and Surgical Association,

AND TO

CHARLES HASTINGS, M.D., F.L.S.,

President of the Council of the Association,

ON THE BEST METHOD OF

PREPARING A REPORT ON BURNS AND SCALDS.

GENTLEMEN,

I beg to thank you for the honour conferred upon me, in authorizing me to draw up a "Report on Burns and Scalds" for the Association over which you preside, and for the appeal* you have made to the members for contributions of facts, and for assistance in my enquiries.

Before I proceed to state the course which I intend to pursue in my enquiries, and what the nature of those enquiries will be, it seems desirable that I should say a few words in explanation of my opinions on the collection of information by means of Associations of practitioners, and the rules to be observed by the reporter in making use of such information as the profession may please to communicate to him. I cannot unfold, to my own satisfaction, my proposed plan of procedure without stating the circumstances which led me to recommend it to the Provincial Association for their adoption.

It was in 1843, that my attention was first directed to the large amount of valuable practical information which is allowed to run to waste by Provincial Practitioners; and I printed in the *Provincial Journal*, for February 3, 1844, a scheme for preserving at a small cost, the papers read before the Medical Societies of the provinces. But it was evident to me that set-essays on diseases were not the best means of eliciting the large amount of practical knowledge possessed by provincial practitioners. I turned my attention to the Provincial Association, (of which, I was not at that time a member,) and in it I thought that I saw a confirmation of this opinion; inasmuch as the members of the Association did not contribute annually as many practical facts to their "Transactions," as were contributed by Guy's Hospital, to its "Reports." Yet the organization of the Provincial Association struck me as being most perfect, and capable of producing contributions on practical points, equal, if not superior, to those of any other Society. In a letter to Dr Hastings, I remarked, "It appears to me that there is no society in the world so admirably adapted for the collection of medical facts as the Provincial Association. The number of beds in the provincial Hospitals is nearly as great as in the metropolitan, and most of the officers of the former are members of the Provincial Association; besides which, the 1700 members of the Association are distributed through a population of not less than fourteen millions."*

It appeared to me, that instead of trying to obtain monographs or essays, it would be much better if the Association would fix upon some one practical question and investigate it for twelve months; for there are many excellent practitioners who have not time to prepare elaborate reports, who would, however, be able to state in a few words, the results of their observation of the value of particular plans of treatment. If a thousand or eighteen hundred practitioners could have their attention directed during the same period to one and the same disease, a great many practical suggestions must transpire. The labour entailed upon each individual would be most inconsiderable, while the aggregate amount of their communications would probably be of great value. It was by such considerations as the above, that I was led to recommend the plan which the Association has appointed me to carry out.† In order to give the plan a fair trial, it is necessary that the disease selected for investigation shall be a very common one, so that all the members may have something to say respecting it.

Perhaps there is no common disease, however unimportant it may appear in an individual case, which is not very important, when we multiply the amount of pain or inconvenience by the number of those who labour under it. If this opinion is correct, the Provincial Association would do well to try to advance the art of medicine by investigating common diseases.

Again; we see in systematic works, and in the journals of the day, recommendations of new remedies, or of new modes of using old ones. Many persons adopt those recommendations, and yet they do not take care to inform the profession of their success with them. In this way medicines obtain a traditional reputation, which is perpetuated in books and lectures.

In order, however, to reform our treatment of disease, it is necessary to have a number of observers, whose attention shall be specially directed to *the same subject at the same time*, and they should have the means of communicating with each other from time to time, and of comparing notes. The Provincial Association consists of a body of such observers, scattered through an immense population. These observers are for the most part plain *practical* men, well qualified by their experience to give an opinion on the value of any

* *Notice to Members.*—Mr. Crompton, of Manchester, being appointed to draw up a report on burns and scalds, embodying, as far as possible, the experience and opinions of the profession, we the undersigned, earnestly request that the members of the Association will afford Mr. Crompton such information on the subject, as they may be possessed of, and that they will further his inquiries by every means in their power.

JAMES HEYGATE, M.D.
CHARLES HASTINGS, M.D.

* Quoted by Dr. Hastings in a letter to the *Provincial Journal*, February 3, 1844, page 354.

† Mr. Hunt, of Herne Bay, proposed a plan subsequently, which agrees with mine in many respects. As he is working out his plan, I need not allude to the differences in our schemes, as they will soon manifest themselves.

method of treatment, or on any remedy, whose collective opinion must be admitted to be of very great value. The Journal of the Association affordes an admirable medium for working the plan; for by the publication of the information obtained from month to month by the reporter, the subject would be kept constantly before the members, and some new practical suggestions would arise out of so many minds directed to one subject at the same time.

One reason for extending the inquiry over a year was to enable the practitioners to record and watch more accurately the cases *occurring within that period.* A great many do not preserve notes of their cases, and therefore they could speak only from memory as to the cases they had seen in past years.

The communications should be printed in the Journal as soon as they are received, either entire or condensed, according to the space at liberty.

In drawing up the Report at the end of the year, each contributor will be mentioned, and the facts will be given, as far as practicable, in the words of the narrator.

In considering what would be the best subject for the trial of the foregoing scheme, I could think of none which seemed so suitable as the treatment of burns and scalds. *They are very common,* and therefore every one has something to say on the subject. *They are very fatal,* and therefore of very great importance. In a letter to me, Mr. Farr observes, "The subject of burns is very interesting. The loss of life is very great. I do not think that the deaths from burns and scalds in the United Kingdom can be less than 4000 per annum."

This subject, however, is important, not alone from the frequency and excessive mortality of burns, but for the extremely unsettled state of opinion respecting the best method of treatment. Since I entered upon this enquiry, Mr. Bransby Cooper has published the following words in the *London Medical Gazette,* vol. xl., No. 1031, September 3rd, 1847:—

"Common as is the occurrence of burns and scalds in the practice of every surgeon, I really think, gentlemen, that there is scarcely any class of accidents, for the treatment of which there are fewer or less decided principles laid down. Nor does this arise from the unimportance of their effects, for the amount of mortality resulting from burns and scalds in every institution is so great, that they have always held a prominent place in the list of deaths from accidental causes; and, during the recovery of those who do survive, there often arises the greatest surgical difficulty in endeavouring to prevent the awful contractions which so frequently attend the cicatrizing process."

Whoever will read the articles on burns in our standard writers, cannot fail to be struck with the want of unanimity of opinion which exists as to the treatment.

John Hunter says,—"There are more remedies for burns and scalds than for an inflammation arising from any other cause."—*Works.* 1837. vol. iii., p. 265.

Mr. Henry Earle says,—"Burns is a subject which well merits your most serious attention, not only from the frequency of its occurrence among the labouring poor, but likewise from the fatal results which so frequently follow, and the calamitous deformities and lameness which so often ensue, should the patient survive the injury. It is, I conceive, most desirable to establish some fixed and settled principles to regulate your conduct in these cases, more especially as so many and such opposite plans of treatment have been adopted at different times; and even at the present day the opinions of practitioners are at variance, and the treatment followed in different institutions is very opposite and uncertain."—*Earle on Burns,* 1832. p. 2.

The subject of burns and scalds, then, is one of very great importance, respecting the treatment of which there is the greatest diversity of opinion: some contending that hot turpentine, and spirits of wine, and alcohol are the best applications; others that cold water is the great remedy; while a third party says that exclusion of the air by cotton, treacle, or any other means, is all that is necessary. I will give no opinion (till the facts are before me,) as to which of these is the correct method of treatment. In appealing to the members of the Provincial Association for facts that may tend to do away with this great diversity of opinion, as to the treatment of burns and scalds, I assure them that whatever communications they may favour me with, shall receive the most impartial and careful consideration in the Report which will be made at the annual meeting of the Association, where every document will be presented for the inspection of the members who are present. As far as it is practicable, the documents forwarded to me will be published in the *Provincial Medical and Surgical Journal,* and it will serve every purpose if gentlemen will send their communications, direct to the Editor of that Journal. My object will be attained more effectually by the *immediate* publication of papers, because they are likely to set those into whose hands they come, thinking on the subject, and will thus lead probably to further papers. I do not want to collect a mass of information to be kept in my hands till the Anniversary Meeting, for the purpose of increasing the novelty of my remarks,—on the contrary, I consider that I ought to assist in giving the *facts* publicity as soon after they reach me as I am able to do. By adopting this course, the members will be able to see the evidence on which the report is founded.

The points which strike me as most deserving of the consideration of the members are the following:—

1. Whether stimulants (spirit of turpentine, alcohol, ammonia, &c.,) are useful in cases of burns and scalds; and if so, in what cases, and in what manner?

N.B. Dr. Kentish's book led to the general adoption of the stimulating treatment of burns.

But prior to his time, alcohol had been recommended by Sydenham and Dr. Harris. Is the treatment by stimulants pernicious, or is it of value only in extensive burns?

2. What is the value of cold applications in burns and scalds? Are they admissible in burns of great extent? In burns of small extent is cold water better than any other application?
3. What is the experience of members as to the value of cotton and flour as a dressing for burns and scalds?
4. What internal remedies are best immediately after extensive burns and scalds?
5. How far do situation and extent affect the cure of burns and scalds?
6. What are the best methods of preventing cicatrices after burns and scalds?
7. What are the *post-mortem* appearances after burns?
8. What is the prognosis in burns and scalds?
9. What is the best method of remedying cicatrices after burns and scalds?
10. What directions ought to be given to the public for the prevention of burns, and for their treatment in the interim between their occurrence and the arrival of a practitioner?
11. Enumerate any practical rules for the management of extensive burns, as regards the healing of the wound, the repression of granulations, and the preservation of the strength of the patient.
12. Give cases of death during apparent recovery from burns.

Surgeons who live in coal-mining districts where explosions occur, may be able to give very valuable information respecting the cure of extensive burns. It would be interesting to ascertain how far the recommendations of Dr. Kentish are acted upon by these practitioners, who have unquestionably the best means of ascertaining what is the best method of treating burns.

The medical officers of provincial hospitals will be able to afford valuable information. It is important to know what are the methods approved of by them. Some hospitals keep records of their cases, and will be able to give some statistical facts.

The communication of the names of surgeons who are not members of the Association; and yet have had much experience in burns, will be esteemed a favour.

Coroners may afford valuable statistical information, and particulars, which may lead to the *prevention* of some burns.

Casts of extreme deformities from burns, cases of the cure of such deformities, and specimens of the apparatus successfully employed for the prevention of them, would be of interest for exhibition at the Anniversary Meeting.

is my intention to visit those districts in which burns have occurred most extensively, and I shall be obliged to members who will give me the names and addresses of gentlemen residing in such places, who are likely to give me information.

From the foregoing remarks you will be able to judge of the kind of information which I stand in need of, and likewise of the mode in which I intend to make use of it. I feel the responsibility of my position, and I will endeavour so to acquit myself to those who favour me with their observations, as may prove that I am desirous of doing justice to all parties, and more particularly desirous of collecting facts which may lead to the improvement of the treatment of burns and scalds.

I have the honour to be, Gentlemen,
Your most obedient servant,
SAMUEL CROMPTON.

71, Grosvenor Street, Manchester,
November 26, 1847.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY,

July 3rd, 1847.

W. H. Partridge, Esq., in the Chair.

Mr. Hill presented to the Society a specimen of scrofulous ulceration affecting many parts of the mucous membrane of the intestines, more particularly the ascending colon, in which part the ulceration was as large as the palm of the hand; the lungs were full of tubercles, with large vomicæ in the right; they were taken from a lady, aged 21.

CARCINOMA EXEDENS UTERI.

Dr. Fletcher brought before the Society a specimen of carcinoma exedens uteri, which had been taken from the body of a patient who had died after more than twelve months severe suffering, during which time very severe hæmorrhages had taken place.

The latter end of April, 1846, Mrs. P—, aged 48, consulted Dr. Fletcher for hysteria and debility, as she had done frequently before, and obtained relief from the usual remedies; and at this time and former ones, all questions relative to the state of the uterus and its functions were answered satisfactorily. The usual remedies were prescribed, and change of air, if they should prove ineffectual. In the second week in May the patient called again, and then admitted that for some time she had been subject to discharges from the uterus, and that after coition these were generally bloody; she had never been quite free from discharges since her last miscarriage of twins, about two years and a half since; she had married early, and been pregnant very many times; she had had nine children, and nine or ten miscarriages. An examination per vaginam was proposed, but this she declined until she returned from the country, where she was going the next day.

On the 20th of May Dr. Fletcher was suddenly summoned to go into the country to his patient, who he found had been in a state of flooding for three days. She was in a very exhausted state, and herself and all

her friends thought she was suffering from a miscarriage. About three hours before Dr. Fletcher arrived, a nurse had very judiciously applied cold vinegar cloths, which had very much arrested the discharge. On examination per vaginam the neck of the uterus was found ulcerated to a considerable extent. The vagina was plugged with a sponge, the use of the vinegar cloths continued, and perfect rest in the horizontal position enjoined, and a car was directed to be in readiness the next afternoon in order to remove her home, in case there should be no return of hæmorrhage, and the state of the patient equal to the journey of six miles. The next day, all being ready, the patient was placed upon pillows, as nearly in the horizontal position as possible, and removed to her own home, and at once carried to bed, from which she never rose again, except some times when at the best to lie upon the sofa for a short time in her bed-room. About six weeks after the first attack of hæmorrhage she had a second, very severe, when the vagina was again plugged. After this she recovered her flesh very much, and became much stouter; again returns of hæmorrhage reduced her. Occasionally she had very severe pains upon pressure in the region of the uterus, which rendered it necessary to apply leeches and fomentations. All through the disease she was very hysterical; sometimes for days her spirits were remarkably good, and all, to the friends, seemed to be going on well; at other times she was low and so much troubled with hysterical depression and nervous twitching of the muscles of the face and tongue, that it was supposed that a very few days must terminate her sufferings. She gradually became more and more exhausted, and died on the 20th of June, 1847.

Post-mortem examination, June 21st.—The contents of the head and chest were healthy. In the abdomen, the lower part of the peritoneum, the pelvic portion, was thickened, and bands appeared thrown out, especially in that part which covers the anterior portion of the uterus between it and the bladder. Of the uterus, about half the upper portion of the body was left, the inferior half having been ulcerated away, almost as clearly as if cut away, and the perforation of the peritoneum, which alone was left, was only prevented by the bands and thickening of the membrane in this part.

SCIRRHOUS TUBERCLES OF THE LIVER, &c.

Mr. Bindley exhibited a specimen of scirrhous of the liver and abdominal glands, pressing upon and obstructing the venous trunks and biliary ducts. He saw the patient only a few days before death, through the kindness of Mr. Jukes, and stated that Mr. W., a confectioner, aged 40, tall and well built, of temperate habits, and previous good health, was attacked about ten weeks ago, after severe mental harass, by the ordinary symptoms of jaundice. The case was obstinate. The stools, from being chalky, became dark-coloured, and contained blood. Vomiting and hiccup came on, the matter ejected being mucus, without trace of bile, and the legs began to swell.

June 18th, 1847. Deep-yellow colour of skin and conjunctiva, with dusky and anxious face; vomiting and hiccup recurring every few hours; stools pitchy, with small coagula of blood; urine about ten ounces in twenty-four hours, dark-brown and turbid, and of acid re-action; abdomen tumid, with fluctuation; anasarca of lower half of the body; tongue covered with a thick brown fur; pulse frequent and feeble. No material enlargement could be felt in the region of the liver, but firm pressure over the umbilicus detected a hard immoveable swelling. Creasote in cinnamon water; ioduret of mercury inunction; beef-tea injections. The symptoms continued unabated till his death, four days from the above date. Blood-globules were discovered in the dark-brown deposit of the fluids thrown off from the stomach; a large quantity of coagula, of most offensive odour, and black, passed off from the bowels; he was easiest when resting on his elbows and knees; urine not more than three or four ounces in twenty-four hours. He became extremely feeble and faint, the lips exsanguined, and delirious wandering preceded his death.

Autopsy seventeen hours after death. Considerable emaciation. Head not examined. *Chest*:—Lungs collapsed but little, adherent on both sides, but most so on the left; the larger bronchial tubes of both were filled with a thick brownish-red fluid, and there was redness of the mucous membrane; the pericardium contained a little clear serum. *Abdomen*.—Diaphragm adherent to the whole convex surface of the liver, either closely and firmly, or by fine cellular bands; six quarts of thin serous fluid, tinged with bile, were removed from the abdominal cavity; the great omentum enclosed a small quantity of fat; within its lamina were five or six masses of schirrous matter, one by which it adhered to the brim of the pelvis, and another the size of a pigeon's egg, close by the transverse colon; around them fat was accumulated, and the vessels were also congested in a small red patch. In the mesentery was a chain of these morbid deposits close to the bowel, along its whole track, three or four inches apart; they were more numerous in the ileum than in the jejunum, and each was surrounded by fat, with its patch of congested blood-vessels. Some of them projected into the intestine, had ulcerated, and opened into it with destruction of the mucous lining. The contents of the intestine were mixed with blood, but on washing with a stream of water, the inner coats, except at the points indicated, appeared healthy; in the appendices epiploicæ of the sigmoid flexure of the colon were also seen similar deposits. The liver was normal in size and texture, of a dark brown colour, not congested; on its whole surface, and throughout its parenchyma, were scattered numerous whitish hard deposits, varying in size from a pin's head to a horse bean, of a round or oval figure; they were also seen in the spleen and tubular structure of the kidneys. But the most remarkable changes were found in the lymphatic glands about the aorta and vena cava, the transverse mesocolon and lesser omentum. They were greatly enlarged, some the size of a pigeon's egg, hard, and when cut into had the ordinary whitish firm texture of scirrhus; they formed a large aggregate mass, surrounding and compressing the large vessels, the duodenum, biliary and pancreatic ducts, and portal

vein, and producing strong adhesions of all the adjacent viscera. The vena cava was so enclosed and pressed on all sides as to be nearly excluded; its coats were thickened, and at one part ulcerated. The cystic duct was distended, and completely obstructed; the hepatic duct could be inflated, and admitted a probe, from the duodenum. The gall-bladder was distended, and occupied a deep fossa in the liver; it contained five ounces of thick glairy mucus, nearly colourless, looking very like mucilage, and the biliary ducts throughout the liver were also distended with a similar fluid, enlarged many times beyond their ordinary size, and with their coats thickened; there was no trace of the colouring matter of the bile; the gall-bladder contained two large calculi, weighing each 105 grains, and about thirty smaller ones, most of them white and smooth externally, and having the soapy feel of cholesterine, weighing altogether four drachms and a half; the coats were thickened, and here and there an ulcerative process appeared to be commencing. The stomach was of normal size; at its splenic end was a large red patch, and some of the rugæ at its lower border were blackened; it contained a thick fluid, tinged with blood; the pylorus was constricted, so as to admit only the end of the little finger. The duodenum placed in the middle of the c... sed glands was small, but its coats were healthy; pancreas large and indurated.

WAXY LIVER: TUBERCULAR ARACHNITIS; PHTHISIS.

Mr. Bindley also exhibited a portion of "waxy" liver, removed from the body of a patient who died of tubercular arachnitis, with tubercular disease also of the lungs, bronchial, and abdominal glands. He saw her only the day before her death, when she was comatose.

Mary Ann Fowler, tall and delicate, aged 16 years, had good health till two years ago, when she menstruated for the first time, and never after. Subsequently to this period her health declined, she became dull and spiritless, and complained of giddiness and pain in the head; the head was hot, and the hair fell off. Her sight became impaired, so that she could not read, and the conjunctivæ were injected. She grew fretful and peevish, slept ill, and was occasionally delirious. Six months ago phthisical symptoms supervened, when those of the head abated in severity. She had dyspnœa, cough, copious expectoration, hectic fever, night sweats and diarrhœa, and was frequently troubled with heaving and vomiting, usually in a morning. Five or six days before death the cerebral symptoms returned, with deafness, delirium, convulsions, and lastly, coma.

Autopsy twenty-eight hours after death. Considerable emaciation. *Head:*—But little venous congestion; under the arachnoid on the surface of the brain generally, but mostly over the right hemisphere, was a thin layer of serum, and a good deal of serum drained from the spinal canal; a deposit of small, rounded, greyish-yellow tubercles was found on the arachnoid, set close together, over the middle lobe of the right hemisphere, opposite the larger wing of the sphenoid bone, and isolated granules of the same kind were scattered around. At this point the membrane was opaque, and the serum turbid; the grey matter of the convolutions was softened and yellowish, with numerous red points and spots, and the morbid change had advanced to the white matter. Similar appearances were observed also on the left side. *Chest:*—Vomicæ small, and not ruptured, in the apices of both lungs, and tubercles in various stages of progress throughout; the bronchial glands at the root of the lungs were enlarged, and full of tubercular matter. *Abdomen:*—Liver *greatly enlarged*, reaching upwards by its convexity as high as the third rib, of a pale drab colour, and exsanguine, thickened, of firm texture, especially at its inferior margin, which was hard, rounded, and of a blue colour; it did not grease the scalpel, or feel fatty to the finger, and on examining the cells under the microscope, the globules of fat were seen small and of normal quantity. The gall-bladder was small, and contained two fluid drachms of dark, olive-coloured bile, as thick almost as treacle, and eight or nine small irregularly-shaped stones; its inner membrane was healthy; the bile in the hepatic ducts was thin, and of a pale-green colour. Glisson's capsule and the peritoneum covering the concavity of the liver were thickened, firm, and opaque; behind was the commencement of a chain of enlarged glands, springing from the head of the pancreas, pushing forwards the pyloric end of the stomach, and pressing on the gall-bladder; they were of various sizes, some as large as an egg, and extended downwards in front of the great vessels, filled with tubercular matter, which here and there had become softened or puriform. The pancreas itself was healthy, as also were the stomach, spleen, and kidneys. The mesenteric glands were enlarged. The ileum presented several patches of sub-peritoneal tubercular deposit, with corresponding ulcers of the mucous membrane internally. Bladder and uterus healthy. There was but little deposit of fat either under the skin, upon the heart, or in the abdomen.

Mr. Bindley also exhibited a urethra, showing stricture, false passage, and fistulous openings, removed from an old man, who died of hypertrophy and ulceration of the bladder, with disease of the kidneys.

SHEFFIELD MEDICAL SOCIETY.

Seventh Session.—Second Meeting, October 20th, 1847.
The PRESIDENT in the Chair.

Dr. Branson exhibited eleven drawings, principally taken from the lungs of grinders, of which they were most faithful representations, done in the manner recommended by Dr. Paxton, of Rugby, in the last Volume of the "Transactions of the Association."

EPITHELIUM PASSED PER ANUM.

Dr. Branson also exhibited under the microscope patches of epithelium, the largest of the size of a shilling, which had been passed per anum in considerable quantities. The patient is 33 years of age, and has been a sufferer, more or less, during the last eleven years. For the last three years she has felt, after each alvine evacuation, "as though the inside were skinned," and during the last year and a half pieces of membrane have been passed with each evacuation, sufficient in quantity to

cover the surface of six or eight inches. The chief seat of the pain is a little above, and to the left of, the umbilicus, and at this point a solid mass can be felt beneath the parietes, giving rise to dulness on percussion. The pain is nearly constant, but greatly aggravated by purgative medicines. The fæces are generally scybalous, and occasionally mixed with blood; when scybalous, the membrane is usually not to be observed until the fæcal masses have been broken up. The bowels seldom act without artificial means, enemata causing rather less pain than purgatives taken by the mouth. Diarrhœa is *occasionally* present; the passing of the fæces is, however, not less painful than when the bowels are constipated. The membrane is now lighter coloured than when first observed; the pieces were formerly quite black, and "just the colour of a damson's skin;" now they very much resemble husks of oats.

INDUCTION OF PREMATURE LABOUR.

Mr. Turton read a paper on the induction of premature labour. He stated that the induction of premature labour had for a long time been practised in this country, and might be regarded as justifiable in two classes of cases. First, in that class in which delivery has been repeatedly effected by the use of the lever or forceps, the children being still-born; or, secondly, where the perforator has become necessary from some insurmountable obstacle to the delivery of the child, especially from that deformity of the pelvis which proceeds to actual distortion. In the first the sole intention may be to induce labour at the most fitting time which is compatible with the viability of the child,—namely, the seventh or eighth month, (although living children born at an earlier period are recorded,) which is generally the most likely time. It unfortunately happens occasionally that the difficulty is insurmountable at even an earlier period, in which case a surgeon is not justified in delaying even to the sixth month, as by such delay the danger may be much aggravated. Different plans have been proposed,—for instance, the rupture of the membranes, or the separation of a portion of the membranes from the cervix uteri. Where the deformity is not very great, this plan has decided advantages; but where the distortion is extreme, it will not at all times be possible. In the first case a blunt instrument, as a metallic bougie, may be used, either to rupture the membranes, or to separate. It is not essential to have an immediate discharge of the liquor amnii, neither is it to be positively considered that rupture has not been effected because the discharge does not immediately ensue. It is a matter of some importance to keep the patient at rest until there are indications of uterine contraction, in order that the system may be prepared for the process of parturition. Mr. Turton's opinion is that it is always best to allow the process of uterine contraction to commence leisurely, without resorting to the secale, which, possessing an expulsory power, and not a dilating one, should only be used as a powerful auxiliary when the cervix uteri is developed.

The first case was one in which premature labour was induced, in order to save the life of the child. The patient had been delivered two years before with very great difficulty and hazard,—so much so, that Mr. Turton recommended most strongly that if she again became pregnant, she should inform him early enough to produce premature labour at or about the seventh month, hoping by that means to save the child. At that period he dilated the cervix and os uteri, and with a blunt instrument punctured the membranes; and when assured that the progress of utero-gestation was arrested, and some degree of expulsory effort was established, he administered the secale in the form of diluted essence, increasing the dose as the effect increased, so as ultimately to produce sufficient expulsory effort. The whole process occupied about a week. In this case he was guided by the conviction, that if the ergot was able to generate true uterine contraction, of which he entertains some doubt, it would not be the safest course to excite expulsory efforts to its more direct effect, before the cervix and os uteri were so developed as to admit of safe and easy expulsion. This was at length effected; the child lived about two days. The death he was inclined to think might not have occurred if the membranes had not been *ruptured*, but merely separated in the first part of the process to arrest utero-gestation.

The subject of the second case, Mrs. T——, aged 29, had borne five children in four labours; the children were all full grown, but, excepting the last one, did not live long after birth. The surviving one was a very small one. The labour was very difficult and tedious, from the existence of deformity. The medical man who attended her declined to attend her if ever she was in labour again, and about the fifth month of pregnancy she applied to Mr. Turton. There was at that period very great difficulty in making an examination, from the close approximation of the rami of the pubis to those of the ischium, and also from the approximation of the pubes to the promontory of the sacrum, the space being at the superior entrance not more than one inch and a half. The aperture was very small on the left side, rather larger on the right, but by no means affording space for the exit of a child, even at the seventh month. There was also great spinal deformity. The difficulty had increased with every labour. The dangers and difficulties of the case were fully stated to the patient and her friends, and she was informed of the absolute necessity for producing premature labour at the earliest period possible. On the 12th of September, being in the fifth month, Mr. Turton endeavoured to reach the os uteri with the fore finger of the right hand, supposing from the pendulous abdomen, that it would be found towards the promontory of the sacrum; this was not the case, and by using the left finger he found it over the symphisis pubis. He tried to dilate the os uteri, in order to separate the membranes from the cervix, but could not effect it, as the arch of the pubis was too much contracted to allow of the introduction into the vagina of any part of the hand. He then introduced a metallic sound, in order to rupture the membranes, as far as he could venture to do. No water escaped; it did so in the former case. On the 13th she had

passed a good night; a dose of castor oil had evacuted the bowels; micturition free; no pain in the uterus, but some in the back; in good spirits. She went on in this way until the 16th, when she complained of pain in the back and loins, as if uterine contraction were commencing, and there was a slight watery discharge. In order to aid this effort, the ergot was ordered to be taken thrice a day. 18th. Utero-gestation decidedly arrested; uterine efforts well marked; discharge much more abundant, and rather fœtid. To continue the ergot every six hours. 19th. No opportunity of examining, but the labour evidently progressing. Ergot to be taken every four hours. 20th. 6 p.m. Pains increased, and much more propulsive; bowels open; micturition free; no unfavourable symptom. About 9 p.m. Mr. Turton was summoned in haste, found the patient in bed, and was told something had passed. On examining he found the fœtus enveloped in the membranes in the bed: they contained also a portion of the liquor amnii, and were not fully ruptured. The placenta soon followed. No hæmorrhage, neither-after pain, of any moment. The uterus readily contracted. The fœtus was a healthy, well-formed one, about the fifth month. As there was strong reason to believe that the membranes were not punctured at any depending part, but that the decidua was partially detached from the cervix uteri, thereby arresting utero-gestation, the unbroken bag of waters would facilitate the dilatation of the os uteri, and Mr. Turton considered this was a reason to endeavour in such cases to merely separate the membranes, and not to rupture. The patient has progressed favourably; she has not since menstruated, and does not recover very rapidly her powers of locomotion.

Mr. Turton deduced from these cases—1. The safety and value of the induction of premature labour. 2. That the means used are both safe, and, in general, easy. 3. That the ergot is a valuable auxiliary, and that the best time for its administration is when we are satisfied that utero-gestation is arrested, as indicated by the pains and the muco-sanguineous discharge.

Foreign Department.

ABSTRACT OF A MEMOIR ON INFANTILE SYPHILIS.

By M. Trousseau.

(Translated for the Provincial Medical and Surgical Journal.)

(Continued from page 665.)

Too much importance can scarcely be attached to the seat of syphilitic eruptions, for often a symptom in itself of no value becomes highly significative from the fact of locality only; thus patches of scaly eruption on the face or trunk would not justify a conclusion that the disease is syphilitic, but the same occurring on the palms of the hands, does not admit of doubt. Two periods may be distinguished in the alterations which occur on the extremities; at first the skin which covers the palms of the hands and soles of the feet is wrinkled, it becomes notably thickened, and looks exactly like the skin of washerwomen who use strong solutions of potash; at the same time these parts inflame, and become more or less red, or yellowish, and fissures are observed at the natural bends of the member. Having arrived at this point, the disease may remain stationary for a short period, when the epidermis begins to scale off without being reproduced, and the diseased surfaces assume a novel and peculiar aspect.

The swelling has now disappeared, and the hardened epidermis is replaced by a new skin, of so slender a texture that the colour of the derma beneath is distinctly visible. Whether they had previously been red or pale, the feet and hands now invariably become of a livid or coppery hue, especially at the pulpy part of the fingers and toes, and around the nails; the nail itself is softened, and surrounded with small ulcers.

What remains to be said of other forms of syphilides in infants, will not long detain the reader. New-born infants are subject to all the forms of secondary disease which attack the adult; the eruptions are similar, and it is therefore unnecessary to enter into details which may be found in other writings. We shall merely point out the differences between syphilis as it appears at the two ages.

Syphilitic roseola is the most frequent of the syphilitic eruptions of the new-born infant. It commences by disseminated points, but soon becomes confluent; though an early symptom, it seldom precedes the coryza. It appears with great rapidity; we have seen it cover the entire body in the space of a night; it also, under proper treatment, disappears with almost equal promptitude. In some instances it disappears, and again re-appears, with rapidity; we have noticed two or three such occurrences in the same subject. Syphilitic roseola is not a severe symptom in itself, but it must be remembered that it is often the precursor of more serious lesions. The papulæ may, for instance, be transformed into pustules, and these again into ulcers.

Pustular syphilide, psoriasis, and mucous tubercles, are of less frequent occurrence than the above-mentioned exanthem. When the secondary eruptions of new-born children commence in the pustular form, they are soon covered with thick brown crusts, the colour of which is apparently attributable to the admixture of blood. The pustules are of variable form, and sometimes affect a circular arrangement, but not with sufficient constancy to afford a means of diagnosing the specific malady.

In order to entertain a just appreciation of the symptomatic value of these lesions, it is necessary to take their situation into account. It is in fact in this circumstance, and the regular stages which they go through, that syphilitic eruptions differ from others.

If difficulties sometimes arise in determining the specific origin of vesicular and pustular eruptions of the skin, it is not so with the "flat tubercle." This is an especial sign of secondary syphilis, and puts on precisely the same appearance in the child as in the adult. Their ordinary seat is around the margin of the anus; but they may also appear on any portion of the body, especially in parts where a duplication of the skin favours the accumulation of irritating secretions.

The labia majora in the female, and the scrotum in the male infant, are often affected by them; more rarely they appear on the inside of the cheek.

The mucous tubercle ulcerates with facility; when it is about to yield to treatment, the base becomes less hard, and the ulcer is covered with prominent granulations. The tubercle either develops itself upon sound skin, or it succeeds to a patch of erythema or psoriasis; its size is variable, but seldom exceeds that of a sixpence.

The last secondary symptom which we have to notice, is that of ulceration of the skin. These ulcers, whether they follow the preceding eruptions or are caused by accidental injury of the skin, exhibit two different aspects, accordingly as they are superficial erosions, or deep-seated genuine ulcerations. Their seat is variable, as in the adult, but they are most frequently seen in the neighbourhood of the genitals and buttocks, and it is there that the skin is frequently irritated by the urine, &c. This irritation, which in a healthy infant would readily subside, in the syphilitic child proceeds to very intractable ulceration. The form and aspect of these ulcers are the same as in the adult. Such are the symptoms by which the syphilitic virus displays itself in the newborn infant. Some of these are invariably seen; others may be occasionally absent; others again are observed in the majority of cases, though not constantly. The disease never, however, confines its manifestation to one individual symptom, but has three or more forms, which succeed each other with a certain regularity. The most common order is that in which we have described them.

At the same time that the local symptoms gain ground, the cachexia becomes more and more marked. The infant which came into the world to all appearance healthy, becomes pale and sallow; the eye-lids are tumid, and the eye-lashes drop out. If any wound is inflicted by accident, it is slow to heal, and puts on a bad aspect. This cachectic condition we regard as the veritable expression of the syphilitic infection, and in no wise depending upon anti-hygienic conditions, or mal-assimilation of food alone. The degree of wasting does not appear to be in proportion to the local affection, as we have seen the most extensive and foul-looking ulceration coincident with a trifling amount of failure of the general powers, and *vice versa*.

The syphilitic infant generally dies by gradual wasting, terminated by an exhausting diarrhœa; but in some cases the death is more sudden, the child sinking in a day or two without affording any signs by which such a termination can be foreseen. After death it is not always possible to account for the event, but in most cases it is to be explained by the effusions which are discovered in the pericardium or pleura.

General Retrospect.

PRACTICAL MEDICINE.

MERCURY IN THE LAST STAGE OF ACUTE HYDROCEPHALUS.

The opinions of the author, M. Golfin, are based upon an extended experience, but of his many cases in which the above medication was found of advantage, he only relates three.

In the first example the disease had reached the stage of effusion in spite of a well-regulated and judicious treatment. The pulse was slow and feeble; there was profound torpor; swallowing had become impossible; the eyelids were half opened, and the pupils dilated; the respiration was slow and irregular. Under these hopeless circumstances, M. Golfin rubbed in a drachm of mercurial ointment every four hours. On the next day some improvement had taken place, and on the fifth day the child was out of danger. In the second case the disease had reached the eighth day. The symptoms were,—dilatation of the pupils, coma, with convulsions of the features. Bleeding and blistering, &c., had been adopted in the first instance, with some benefit; but effusion had nevertheless taken place, and was on the increase, when mercurial inunction was resorted to as in the former instance. At the end of six and thirty hours, considerable benefit was observed, and the case became rapidly convalescent. The third case was in every respect similar.

[As we have no information of the early symptoms in the above cases, it is not easy to determine to what form of cerebral affection the effusion was to be attributed. Had they been instances of tubercular meningitis, the ordinary form of disease to which the term acute hydrocephalus is applied, it is to be doubted whether the benefit described would have ensued.]—*Gazette Medicale*, September 11, 1847.

TREATMENT OF EPILEPSY.

Dr. Marshall Hall says that the idea of *a* remedy for this disease, is for the most part a superstition not more deplorable than the dependence upon an amulet. The first thing to be done is to ascertain the causes of the disease, and to avoid them; if the cause of the epileptic convulsions be gastric or enteritic irritation, the stomach and bowels are to be promptly relieved. In that form of epilepsy which arises from uterine irritation, every precaution should be adopted which can allay it, such as warm fomentations to the uterine region, warm vaginal injections, &c. The next point which demands attention is the state of sphagiasmus. The head should be raised, the neck exposed, and forced inspirations excited by dashing cold water on the face. The rest of the treatment at this period of the seizure consists in free exposure to the open air, applying cold to the head, and if there be convulsions, guarding the patient from injury.

Much depends upon the regulation of the sleep in epileptics. Every precaution should be taken to prevent the sleep from being too deep, or suddenly disturbed. The patient should retire early, and have

some one quietly, but constantly, moving about the room. Such early sleep, quietly interrupted, is not so deep as that which takes place in the stiller and darker periods of the night. The object is to ward off an attack and to break the habit of periodicity.

All mental excitement must be avoided, with heated rooms, and late hours. The diet must be simple and nutritious, without stimulus; the bowels must be carefully watched and regulated, and the skin must be excited by tepid or cold sponging, followed by friction with a course towel.

"All these things must be done carefully and perseveringly by those who would do everything to remove the great evil. There is no royal road to health in such a case, and they who trust to a mere remedy, whether it be fætid as assafœtida, blue as indigo, or be brought from the Hague, or as far as the Indies, to the exclusion of those means which can reasonably conduce to recovery, are guilty of the danger to mind or life of the unfortunate patient."—*Lancet*, October 30, 1847.

ÆTHEREAL INHALATION IN DELIRIUM TREMENS.

By Dr. Upham, Boston.

William Perry, an Irishman, 48 years of age, is of sanguine temperament, strong and robust frame, and has generally enjoyed firm health. He is a hostler by occupation, and has been a man of intemperate habits for many years. On Monday, July 12th, he was committed to the House of Correction, having for several days previously been drinking very freely, according to his own statement. On the same day he presented himself to the hospital as an out-patient, for treatment of chronic ulcer on the leg. At that time he showed no indications of delirium tremens, with the exception of slight tremors, manifested particularly about the hands. Towards evening he grew wild and uneasy; tremors increased and became general. Slept but little during the night, and was found next morning in a state of high excitement, with tongue thickly coated, pupils dilated, lids tremulous, muscles universally agitated, pacing his cell, talking incessantly, and raving incoherently.

During the following twenty-four hours the patient showed all the usual symptoms of delirium tremens in a marked degree. He slept none, but walked the floor without intermission, talked disconnectedly, and, as is usual in like cases, busied himself in the performance of imaginary tasks. He was constantly pressing against the walls of his cell, or endeavouring, with the fancied assistance of horses, to remove the iron door. Meanwhile, if questioned, he would answer to the best of his ability, and obey directions with alacrity for the moment, but immediately relapsed into his previous state of delirium. This, at times, assumed a violent form, so that it was deemed necessary to take away his bed and all other moveable articles within his reach, and keep attendants by him day and night to protect him from injury. For the succeeding forty-eight hours, this state of things continued with but little variation, all the grave symptoms increasing in severity.

The usual treatment having failed, and large and repeated doses of morphia proving utterly powerless to produce sleep, the patient was found on Friday morning still in a state of wakefulness and high delirium, but so much exhausted as to make it a matter of the highest moment to induce sleep immediately. In this condition it was thought expedient, as a last resort, to make trial of æthereal inhalation, and the æther was accordingly administered by the sponge.

The patient was very refractory, and required to be held by assistants, in the meanwhile struggling, raving, and cursing. After inhaling the vapour for the space of ten or twelve minutes, he appeared quiet, and was thought to be fully under the æthereal influence; but upon the removal of the sponge he sprang up and commenced raving anew. The process was repeated, and continued for ten minutes more, at the end of which time the patient was brought fairly under the desired influence, and fell asleep. From this state of *artificial sleep* he passed, *without waking*, into a quiet, deep, and untroubled slumber, which continued, *without intermission*, for four hours and a half. He was seen several times during the continuance of this sleep, and within a few minutes after he awoke. He then appeared perfectly rational, called for cold water, and asked to have his leg dressed, (he had bruised it badly during the delirium.) In the course of half an hour he fell again (as was anticipated,) into a quiet sleep, which continued, with few intermissions, during the afternoon and night. This morning (Saturday,) he appears perfectly rational and well, though weak. Has no recollection of anything that has happened, from nightfall on Monday to the time of his first waking on Friday afternoon.—*Boston Medical and Surgical Journal*, August 17th.

SURGERY.

OPERATION FOR ENTROPIUM.

Instead of cutting through the entire eyelid, as in Crampton's operation, Dr. Wallace has for some years past made an incision through the entire length of the tarsus, about the eighth of an inch from, and parallel to, its margin. From this incision to the margin he cuts through the tarsus again, at each canthus, and at the middle, making the letter m; or, if the curvature is very great, he makes more perpendicular incisions. Threads are then drawn through the integuments, and fastened to the forehead, as in Crampton's operation. As the curved tarsus only is divided, the deformity occasioned by cutting through the integuments in Ware's and Crampton's operations is avoided.

From the lifeless relaxed state of the eyelids, after the application of the vapour of prussic acid for opacities of the cornea, he would be inclined to try its effects in diminishing the irritability of the eyelids previous to an operation.—*Boston Medical and Surgical Journal.*

MIDWIFERY.

RULES OF TREATMENT IN PLACENTA PRÆVIA.

Dr. Alexander Tyler's paper in the *Dublin Quarterly Journal*, (May,) terminates with the following rules of practice:—

1. In cases of partial placenta prævia the membranes should be ruptured as early as possible, and the uterus emptied of its fluid contents.

2. In the same class of cases after the escape of the liquor amnii, should vigorous uterine action not ensue, to encourage this end by means of friction over the fundus uteri, the application of a binder, the administration of ergot, or the use of galvanism, as recommended by Dr. Radford.

3. In complete placental presentation when the os is rigid and undilated, never to attempt to extract the placenta through it in that state, but to plug the vagina carefully with sponge dipped in vinegar and water.

[We need not point out that this is too sweeping a recommendation.]

4. As soon as the os uteri is sufficiently dilated, to seize a foot and deliver cautiously.

5. If the child be dead, and the head presents, it may be perforated.

6. As I attribute the cessation of hæmorrhage in Dr. Simpson's cases of extraction of the placenta, to the fact of the uterus being thereby emptied of its fluid contents, and allowing the presenting part to be pressed against the bleeding orifices, that in certain cases the placenta might be pierced with a gum elastic catheter, and the liquor amnii thus allowed to escape.

ÆTHERIZATION IN MIDWIFERY.

M. Roux terminates a memoir on this subject by the following conclusions :—

1. Women in labour are as readily brought under the æthereal influence as others.

2. The puerperal condition does not modify the effects of æther, nor is it injuriously influenced by it.

3. In ordinary labours, the annihilation of pain has no injurious effect.

4. In laborious labours, it is right, for the sake of both mother and child, to annihilate pain.

5. The uterus and abdominal muscles continue to act energetically during æthereal trance, while the perineal muscles relax. A cessation of uterine contraction, when æther is employed, is not observed oftener than under ordinary circumstances.

6. The child is unaffected by the æther.

7. The consequences of labour are not injuriously modified by the effects of æther.

8. Recovery seems, as in the case of surgical operations, to be expedited by it.—*Gazette Médicale*, Oct. 9me

TOXICOLOGY.

DETECTION OF ARSENIC IN THE FLUID OF A BLISTER.

M. Legroux, of the Hospital Beaujon, was summoned to a young woman who had the evening before swallowed arsenic for the purpose of committing suicide, but refused at the time to give any explanation of her symptoms. The dejections from the stomach and bowels had been removed, and the urine was scanty. Not having a clear insight into the case, M. Legroux applied a blister, and submitted the serum of the vesication to M. Chatin for analysis, together with some of the urine.

After destroying the organic matters of the serosity and the urine, M. Chatin dissolved the residue in distilled water, and tested for arsenic with Marsh's apparatus. Both fluids gave numerous distinct arsenical stains. The above affords the medical jurist an useful hint in certain cases of poisoning in which it is not possible during life to obtain the excretions for the purpose of analysis.—*Gazette Médicale*, Octobre.

PREPARATION OF CHLOROFORM.

We have been favoured by Professor Simpson with the subjoined remarks on the preparation of Chloroform :—

"I have seen different instances reported in the English and French Journals of patients requiring to inhale chloroform for five, ten, and even twenty minutes, before they came under its influence. In all such cases, the chloroform used must have been of a most inferior quality. I have generally seen patients affected in about a minute; they rarely resist it for above two minutes; and never, or almost never, above three. The chloroform which I have mostly used, is that manufactured by Messrs. Duncan, Flockhart, and Co., chemists, Edinburgh. It is made according to the following formula of Dumas :—

"R. Chloride of lime in powder, - - lb. IV.
Water, - - - - - - - - - lb. XII
Rectified Spirit, - - - - - - f-oz. XII

"Mix in a capacious retort or still, and distil as long as a dense liquid, which sinks in the water with which it comes over, is produced.

"The product obtained by the above process, is rectified by agitating it with several portions of strong sulphuric acid, and afterwards distilling it from carbonate of baryta. Messrs. Duncan and Co. inform me, that they always distil it a *third* time from lime, and that they believe it would be impossible for them to furnish it perfectly pure without this. Latterly, they have made and sent out fron 60 to 80 oz. per diem (2s. per oz.,) manufactured by this process. In the observations which I previously published, I inadvertently omitted to state and insist upon the purifying part of the process.

"Of several specimens I bought in Glasgow, only *one* was of the proper strength and purity. I bought a specimen yesterday in an Edinburgh shop, sp. gr., only 1.130 instead of 1.480. There was little or no chloroform in it."

Dr. Simpson believes that all the reputed failures and misadventures are attributable to two causes,—viz., 1. using an impure and imperfect variety of chloroform; and 2. not giving it in sufficiently large and rapid doses.

SCARLATINA ANGINOSA.

In cases of scarlatina anginosa, where we are disappointed in the expected convalescence, is it not from the morbific matter or serum thrown off from the fauces and diseased glands, which is absorbed by the small veins; these communicating with the internal jugular vein, by which it is readily carried to the heart itself, and so acts as a poison? The same in angina maligna. In the early stage of this inflammation, I have found unquestionable advantage to arise from the use of a pretty strong solution of lunar caustic; and some of the practitioners of the neighbourhood in which I reside can confirm what I have said. The mode here

recommended is to apply it daily, by means of a sponge, to the fauces as long as the inflammatory action prevails.

I have been told that a Dr. McVea, who practiced many years ago in Leicester, used the following recipe, and that he obtained considerable popularity in treating the disease in question :—

R. Spt. Rectificat., Acid. Sulphurici, partes æquales. M.

I know that by its use after sloughing, or during ulceration, much good is derived, and the method of applying it is by means of a camel's hair pencil, directing the patient to wash the mouth immediately afterwards.

A MEMBER.

DEATH OF DR. HOLME, OF MANCHESTER.

It is with deep regret that we announce the loss which the Provincial Assocation has sustained in the disease of our highly respected associate, Dr. Holme, of Manchester. Dr. Holme was a Vice-President, and had been one of the early Presidents of the Association. He was appointed President elect at the Anniversary Meeting, held at Oxford, in the year 1835, and presided over the Association at the ensuing Anniversary, held at Manchester, in the year 1836, having from his first admission as a member, manifested the greatest interest in the prosperity of the Association. Dr. Holme was also a Fellow of the Linnæan Society, President of the Literary and Philosophical Society, of Manchester, and well known, both by his general, literary, and scientific attainments, and as a learned and accomplished physician. He died on Sunday, November 28th, at Manchester, in the seventy-eighth year of his age. We hope to be able to give a more extended notice of his honourable and useful career in a future number.

Medical Intelligence.

HOUSE OF COMMONS.

Medical Registration.

On Tuesday, November 30th, Mr. Wakley moved—"That a Select Committee be appointed, to inquire into the registration of legally-qualified practitioners in medicine and surgery, and into the laws and charters relating to the practice of medicine and surgery in Great Britain and Ireland, and to report the evidence, with their opinion thereupon, to the House." The motion was made with the sanction of her Majesty's Ministers, and was carried unanimously.

PROGRESS OF THE CHOLERA.

It is stated that the cholera has broken out in the department of Ternopol, in Galicia. There has been a report also within the last few days that cases of the disease had appeared in London, and that two fatal cases had occurred in the borough of Southwark. Inquiries have been made on the subject, and the report is believed to be entirely without foundation.

POOR-LAW COMMISSION.

Charles Buller, Esq., Member of Parliament for the borough of Liskeard, has been appointed President of the New Poor-Law Board.

APPOINTMENTS.

Dominick John Corrigan, Esq., M.D., has been appointed Physician in Ordinary to Her Majesty, in Ireland.

H. Haynes Walton, Esq., has been elected Surgeon to the St. Pancras Royal General Dispensary.

On the 18th of November, the Electors of the Radcliffe Fellowships, appointed James Claudius Paxton, M.B., to be one of the Fellows on that Foundation, in the room of the late Dr. George Bell.

ROYAL SOCIETY.

The following gentlemen were elected at the Anniversary Meeting as the officers and council for the ensuing year : — *President*, the Marquis of Northampton; *Treasurer*, G. Rennie, Esq.; *Secretaries*, Dr. Roget and S. H. Christie, Esq.; *Foreign Secretary*, Lieut.-Colonel E. Sabine; *Members of the Couneil*, T. Bell, Esq., R. Brown, Esq., Sir J. Clark, Bart., M.D., S. Cooper, Esq., Sir H. De la Beche, Professor E. Forbes, J. P. Gassiot, Esq., Professor T. Graham, T. J. Graves, Esq., Sir J. F. W. Herschel, Bart., W. Hopkins, Esq., Sir R. H. Inglis, Bart., C. Lyell, Esq., the Duke of Northumberland, G. R. Porter, Esq., Lieut.-Colonel Sykes.

The Copley Medal was awarded to Sir John Herschel, and the Royal Medals to Mr. Grove and Dr. Fownes. Dr. Roget announced his intention of retiring from the office of Secretary at the next anniversary.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.

At the Annual Election Meeting of the Royal College of Physicians, Edinburgh, held on the 2nd of December, the following gentlemen wers elected Office-Bearers for the ensuing year :—

Council.

Dr. Robert Christison, *President;* Dr. Wm. Beilby, *Vice-President;* Dr. Robert Renton; Dr. Charles Ransford; Dr. William Seller; Dr. George Paterson; Dr. Alexander Wood.

Dr. John Thatcher and Dr. J. G. M. Burt, *Censors;* Dr. Charles Ransford, *Treasurer;* Dr. David Craigie, *Secretary;* Dr. William Seller, *Librarian;* Dr. Peter Fairbairn, *Fiscal;* Dr. James Stark, *Keeper of the Museum;* Mr. Kenneth Mackenzie, *Clerk;* Mr. John Small, *Under Librarian;* Robert Moffatt, *Officer*.

Examiners of Foreign Graduates.

Dr. R. Christison; Dr. Thomas Traill; Dr. William Seller; Dr. G. Paterson; Dr. John Moir; Dr. Alex. Wood; Dr. T. H. Bennett.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, December 3rd, 1847 :—W. England; W. S. Savory; H. B. Holl; J. Bustin; R. Montgomery; J. G. Doldge; J. F. Stephenson; T. G. Salt; W. Davies; C. Forbes; A. J. Gee; W. Morris; A. D. Horne.

Gentlemen admttted Members on Friday, December 10th, 1847 :—T. L. Gray; H. Tizard; J. Levey; J. Adolphus; H. Lord; E. F. Fussell.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, November, 25th, 1847 :—Ezra Harle, Stansted, Essex; William Faithfull, Hurst Pierpoint; John Pince Challacombe, Bristol; George Hodges, Ludlow; Thomas Park, Lincoln.

Thursday, December 2nd, 1847 :—Edward Henry Malton, Glastonbury; Thomas William Crosse, Norwich; James Horniblow Williams, West Stockwith, Bawtry.

OBITUARY.

Died, November 18th, at Dundee, from fever, ——— Carruthers, Esq., M.D.

November 20th, aged 32, from fever, Henry Baller, Esq., Medical Officer to the Aldgate District of the East London Union.

November 25th, in Guildford Street, London, aged 59, Scrope Hutchinson, Esq., M.D.

November 28th, aged 66, William Wilson, Esq., M.D., Surgeon, R.N.

November 30th, at Warrington, aged 77, James Kendrick, Esq., M.D., F.L.S., Consulting Physician to the Warrington Dispensary, Infirmary, and Lying-in Charity; a Member of the Council of the Provincial Medical and Surgical Asscciation, and one of the earliest and most respected members of the Association.

December 2nd, in Portland Place, aged 49, J. S. Campbell, Esq., M.D.

December 2nd, at Wellington, Somerset, aged 56, William Collard Pyne, Esq., M.R.C.S.

December 6th, at Camden Town, Dr. Wigan, author of the work "On the Quality of Mind."

December 7th, in Clifford Street, aged 52, of aneurism of the arch of the aorta, Robert Liston, Esq., Fellow and Member of the Council of the Royal College of Surgeons, and Surgeon to, and Lecturer on Clinical Surgery at, University College Hospital. Any comment on Mr. Liston's high professional qualifications as an author and skilful surgeon is unnecessary.

Lately, of influenza, M. Delmas, Professor of Midwifery in the University of Montpellier.

BOOKS RECEIVED.

A Manual of Elementary Chemistry, Theoretical and Practical. By George Fownes, F.R.S., Professor of Practical Chemistry in University College, London. Second Edition. London: Churchill. 1848. Fcap. 8vo., pp. 596. Numerous Illustrations.

A Treatise on Diet and Regimen. By William Henry Robertson, M.D., Physician to the Buxton Bath Charity. Fourth Edition. Part IV. London: Churchill. 1847.

The Pocket Formulary and Synopsis of the British and Foreign Pharmacopœias, &c. By Henry Beasley. Fourth Edition. London: Churchill. 1848. 18mo., pp. 445.

Researches into the Pathology and Treatmant of the Asiatic or Algide Cholera. By E. A. Parkes, M.D. Lond., Assistant Physician to University College Hospital. London: Churchill. 1847. 8vo. pp. 250.

Contributions to the Pathology and Practice of Surgery. By James Syme, F.R.S.E., Surgeon in Ordinary to the Queen in Scotland, Professor of Clinical Surgery in the University of Edinburgh, &c. &c. Edinburgh: Sutherland and Knox. Simpkin and Marshall, London. 1848. 8vo. pp. 336.

On Poisons, in Relation to Medical Jurisprudence and Medicine. By Alfred S. Taylor, F.R.S., Lecturer on Medical Jurisprudence and Chemistry in Guy's Hospital. London: Churchill. 1848. Fcap. 8vo., pp. 855.

Account of a Case in which Two Fœtuses were united at the Sternum, with only one Liver and one Common Heart. By R. N. West, Esq., Surgeon, Hogsthorpe, near Alford, Lincolnshire. (*From the Edinburgh Medical and Surgical Journal.*) pp. 12. Two plates.

Alveolar Hæmorrhage Compress, constructed by Dr. R. Reid, Dentist, Edinburgh, with an Engraving. (*From the Monthly Journal of Medical Science.*)

TO CORRESPONDENTS.

Communications have been received from H. B. B.; Dr. J. Black; Mr. A. Markwick; Mr. S. G. Sloman; Mr. F. F. Giraud; Mr. G. J. Rose; Dr. Wardell; the Birmingham Pathological Society; Mr. T. F. Brownbill; Dr. Cullen; Dr. Oke; the Sheffield Medical Society.

Quid pro quo.—The writer of the letter alluded to had mistaken the import of some of our observations. As it would have called for a longer explanation than the pressure of other matter at that time permitted, the letter was necessarily withheld.

M.D.—The attack of the President of the Royal College of Physicians of London on his provincial brethren has not escaped our notice. Circumstances have hitherto prevented our setting him right, but we shall take an early opportunity of alluding to some subjects on which, from his evidence before the Committee of the House of Commons, it would seem that he is very imperfectly informed.

It is requested that all letters and communications be sent to Dr. Streeten, Foregate Street, Worcester. Parcels and books for review, may be addressed to the Editor of the Provincial Medical and Surgical Journal, care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

NOTES OF THE FAMINE FEVER,

AS IT OCCURRED IN CROYDON, SURREY, DURING THE MONTHS OF JULY, AUGUST, AND SEPTEMBER, OF THE PRESENT YEAR.

By GEORGE BOTTOMLEY, Esq., Surgeon.

A considerable immigration to this neighbourhood of Irish poor always occurs during the summer months, occasioned by the demand for labour, afforded by the harvest, as well as by the hop-picking of the adjoining counties. About the middle of June in this year, it took place to a much greater extent than usual, as compared with former years. Nearly all the Irish patients who applied for parochial medical relief at this period, had evidently suffered from the privations of the famine, in the winter and spring of 1847, and had been compelled to make great physical exertions in order to obtain the means of accomplishing their journey to this country, and during its progress. The result was an influx of fever cases to the infirmary, during two of the summer months, which appeared to be greatest at the beginning of August. One hundred cases were treated as in-door patients, and seventy-four received attendance without. The former were Irish almost exclusively; the latter included a considerable portion of the town poor.

The same type of fever exhibited by the infirmary cases, which of necessity could be more closely watched than the others, was almost universally exemplified in each. It may be thus described:—The patient, on presenting himself, usually complained of great prostration of strength, pains in all the bones, constant thirst, no disposition to eat, and usually pain in the head. His appearance was haggard, countenance very anxious, the eyes sunken, and general condition emaciated. The pulse varied from 90 to 120, was small and compressible; the tongue was covered with a clear white coat, and exhibited nervous tremor. On questioning, it appeared that rigors were always experienced at the commencement of the attack; the bowels in some cases were constipated, but there was frequently suffering from diarrhœa. The history of the case elicited the facts of the patient having slept out for some previous nights under a hedge, or in a ditch, and of having walked some miles during the same or preceding days. On his appearance at the infirmary therefore, it might be calculated that for six or seven days successively he had struggled with the complaint. This condition was then evidently one of great depression and exhaustion of the powers of life. The symptoms already enumerated would continue, with little alteration, for a week, during which time the skin was pungently hot and dry, and the urine scanty and high coloured. After the *primæ viæ* had been acted upon by laxatives, mild mercurials and diaphoretics were administered, usually in the following form:—

R. Hydr. Chlorid., gr. ij; Opii Pulv., gr. $\frac{1}{2}$; Ant. Potassio-Tartr., gr. 1-6th. M. Fiat pilula.

One pill might be given for four nights consecutively, or perhaps one, night and morning, as the case demanded. In others the Hydrarg. cum Creta., combined with Pulv. Ipecac. Co., secured the alterative and sedative effects which were required. Saline draughts were given frequently; free sponging of the body, with cold vinegar and water, was used with much advantage, and toast and water and barley water supplied liberally for drink. Diet to be low.

The most usual complication presented was a cerebral affection. This might occur in almost all the cases as a somewhat prominent feature of the disease. Cold applications to the head, which was often shaved, were constantly renewed; a blister to the nape of the neck was extremely efficacious, if the case became urgent.

At the end of the first week after admission, a kind of crisis appeared; after several hours of profuse perspiration, the patient's symptoms decidedly improving. The tongue began to clean, the pains in the limbs to abate, and all that was complained of was extreme weakness. At this point more substantial diet would sometimes seem to be indicated, and in another day or two the patient would earnestly request it. If the symptoms continued to improve under more nourishing regimen, as in the majority of instances was the case, for a few days all promised exceedingly well; but almost invariably by another week a sudden change would take place, the tongue became as coated as ever, and all the original symptoms would present themselves, apparently in as much strength as at first. The recurrence to low diet of course immediately followed, and the relapse was again treated as the primary attack, though usually it proved less obstinate in point of duration. The recovery would then take place very slowly, the longest remaining sequence being want of muscular power. Many weeks must elapse before anything like a complete re-instation of the strength took place. Most patients, though apparently from their condition and spirits looking quite themselves again, found, on their dismission from the

infirmary, a much greater prostration of the vital powers than either they or any casual observer would have suspected. None, I should think, were able to engage in agricultural labour during the season. This conjecture I have been able to verify in several instances by personal enquiries since.

At the end of the first week referred to above, just as the system was throwing off the first onset of the febrile attack when the arterial action was diminishing, no local congestions presenting, and the digestive functions seemingly in a more healthy condition; the crisis would frequently result in a different course. After two or three days of apparent quiescence, which might be presumed on the whole to be something like general improvement, a yellowish line would appear down the centre of the tongue, then dryness and a slightly cracked appearance followed; the pulse became weaker, and gradually sank to 60 or 70; the countenance wore a more anxious expression, and there was disinclination to food. On the exhibition of port wine or brandy, as the state of the case might seem to indicate, these symptoms would perhaps gradually subside, and the recovery take place without the relapse, as in the foregoing instances; but in a few cases complete typhus ensued, with all the usual symptoms of great nervous depression. These were treated by the constant exhibitions of concentrated nourishment, and stimulants when the power of swallowing was in abeyance; strong beef-tea injections supported Nature until her powers rallied. Ammonia and quinine in connection with small opiates were administered according to circumstances, and with close watching and constant attention, the third week would nearly bring the patient through the severity of the attack, which then left him in an exceedingly weak condition. Here, especially, though the rule applies generally to every case, the greatest care was necessary in directing the advance towards convalescence. That it should be sure, it was absolutely necessary to be also slow.

In reviewing the general character of the fever in question, it is worthy of remark that the complications were those of the head and mucous lining of the intestinal canal. In three patients jaundice occurred, terminating fatally with one of them; and in one or two only, was there any tendency to chest affection as a consequence of the fever. From the foregoing details it will be apparent that the form of fever described approaches nearly to that known as the "simple continued," the "synochus" of Cullen; but a strong tendency invariably existed towards a termination in one of a low nervous or typhoid type. Keeping this in view the indications were plain,—viz., to be as sparing of antiphlogistic treatment as the case would allow, discarding the use of the lancet altogether. It should be remarked that this plan was literally adhered to, for in no one instance was venesection performed. Even in the administration of mercury, antimony, and purgative medicines, great care not to be too liberal in the use of depressants was necessary, and to commence the exhibition of nutritious diet, however small the quantity, as soon as the stomach was enabled to perform its functions; while the first tendency to exhaustion was promptly met by stimulants, cautiously and gradually afforded according to the urgency of the symptoms, with strict attention to the cerebral affection, when evidenced by a comatose condition of the patient, insensibility of the pupil, subsultus tendinum, by means of cold applications and counter-irritation of every kind.

One case illustrative of the latter remark is, I think, deserving of notice. It was that of a young Irish woman, of large frame and apparently good constitution, who furnished perhaps the most seemingly hopeless case of typhus in the infirmary. The head symptoms just referred to, had continued without any favourable intermission for three days. The insensibility was so great that it was almost impossible to arouse her. Strong sinapisms to the calves of the legs produced but very slight proofs of her consciousness of the application. She resisted every attempt to make her swallow any liquids, so that during that time not two ounces of wine or beef-tea were conveyed to the stomach, nor had there been any motion from the bowels. On the evening of the third day a full drop of croton oil was administered, the result of which seemed almost magical. In the course of the night two or three stools passed freely, and in the morning the cerebral symptoms disappeared. She was able to recognize her attendants and to anwer questions. From that time she gradually improved and has since recovered, though marked traces of the severity of the attack will long remain.

It is worthy of remark that there was not much ground for believing the fever to be infectious, as infection appeared to arise only from the accumulation of cases in one ward, the air becoming so impregnated with noxious effluvium, emanating from their bodies, that those who came in contact with it suffered such as miasmata would produce arising from any other source, and by separating the patients, the appearance of infection immediately vanished. Those who were suffering from it were distributed indiscriminately among other patients in each ward, as the principle adopted was to divide as much as possible the cases, and not to accumulate them in one apartment. With unremitting attention to ventilation and cleanliness, points of the utmost importance, especially in the treatment of the Irish, I believe little or no danger of infection existed. Had separate wards been devoted to the fever patients alone, I have no doubt the results would have been far less favourable, while under the plan adopted the other patients have not suffered. Two out of six nurses, who were engaged in constant attendance, were attacked, and exhibited the type of disease described in rather a severe form; but this is not surprising, if we consider the very arduous character of their engagements at this period. The number was by no means adequate to the duty, and great difficulty existed to retain even their services, the night work being severe, and the daily attendance of a most trying character, owing to the condition of the patients. I acted on the principle of providing full and stimulating diet for them, while I recommended to the visiting clergymen, the only precaution which

I and those who assisted me adopted—namely, the taking a glass of wine and a biscuit before entering the wards, and not the slightest fever symptom appeared to those brought into contact with the sick. I have little doubt that the result would have been much less satisfactory had our fears of danger led us to make fever wards, and so to concentrate the miasmata, which it was our grand object to disperse.

The mortality was as under:—

In-door cases 100—Deaths 3
Out-door „ 79— „ 1

I have no hesitation in attributing this very small mortality chiefly to the unlimited supply of stimulus and concentrated nutriment which I had it in my power to afford; and to the constant, kind, and watchful attention with which the much-respected matron of the infirmary and our experienced nurses seconded the directions of the medical attendants.

Croydon, November 20, 1847.

EXTENSIVE DILATATION OF THE AORTA, SIMULATING ANEURISM; ULCERATION OF THE LINING MEMBRANE; PARALYSIS; SOFTENING OF THE BRAIN.

By George Norman, Esq., F.R.C.S., Senior Surgeon to the Bath United Hospital.

(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, September 30, 1847.)

The Rev. Mr. P., aged 43, of large stature and robust appearance, excepting that his countenance was sallow, became my patient in the middle of May last. He had been subject during the previous four or five years to rheumatism, occasionally severe, generally attacking the muscles, but at times the large joints. About two years ago he began to find some difficulty in walking up-hill, and going up-stairs, and to have occasionally excessive throbbing of the heart; and soon after it was observed that the pulse at the left wrist was small and indistinct, whilst that of the right was full and hard, but at that time there was no intermission. He was supposed to have aneurism of the aorta, and was treated by small bleedings, rest, and low diet.

About twelve months since he had an attack of violent pain in the head, and in about an hour after, a numbness and loss of power in the left arm and leg, without any loss of consciousness. These symptoms soon ceased and his arm and leg were restored to their full power in a few days. About three months before he came to Bath he had an inflammatory attack accompanied by great pain in the back and left side, which was supposed to arise from inflammation of the kidney, and he was bled repeatedly.

He came to Bath in the middle of May last, when I first saw him. He had then no other pain than occasional muscular rheumatism; his pulse at the right wrist was full, hard, and generally about 80, and similar in character to what is usually felt where there is an hæmorrhagic tendency; the pulse at the left wrist was small and indistinct; there was great throbbing over the region of the left ventricle, and the heart occupied a larger space in the chest than natural. There was no sound indicating aneurism, or valvular obstruction, but the excessive pulsations of the left ventricle were continued in the course of the ascending aorta. He could lie on either side, could walk with ease on level ground, and complained very little, excepting of rheumatic pains.

In this state he continued with but little change till the middle of June, when he experienced occasional paroxysms of severe cough, with some bloody expectoration and difficulty of breathing, but both the cough and the dyspnœa would entirely disappear for days. About this time he was carefully examined by Dr. Davies and myself; there was no evidence of any disease of the lungs or of the pleura. The action of the left ventricle was excessive and extended upwards in the course of the aorta. There was an indication of roughness in the internal lining of the aorta, and of a thickening, but no obstruction of the valves, and no sound indicating aneurism; the left ventricle was enlarged. We considered that there was hypertrophy of the ventricle, thickened valves, and dilated aorta; but we could in no way account for the state of the pulse at the left wrist. The urine, which before had been in sufficient quantity, now became scanty, and his legs to be œdematous. He was put on a course of mercury, with squill and digitalis. For a short time there was some improvement, but the attacks of dyspnœa soon became more frequent and distressing. It appeared that some pressure on the trachea either occasioned or aggravated the cough, for often the cough and difficulty of breathing would entirely cease for some days, and then return generally in the night, with increased violence.

In the beginning of July he was suddenly attacked with palsy of the left side, without any pain in the head, or loss of consciousness. He was bled, and the blood drawn had a thick buffy coat, and whenever he was bled afterwards, which he was several times in small quantities under urgent symptoms, the blood always exhibited the same inflammatory appearance, and he was always relieved by the bleeding. The power of the left arm and leg returned, to a certain degree, the next day, and afterwards gradually improved, but was never entirely restored. The returns of dyspnœa now became much more frequent, and he lost strength daily. A few days before his death, which occurred on the 31st of July, it was observed that during the attacks of difficulty of breathing, there was a sound in the upper part of the chest, as of some loose substance flapping backwards and forwards, audible to those standing by the side of the bed. On the day of his death he was seized with a violent attack of dyspnœa, with faintness, and intermittent pulse; he became exhausted, and died in a few hours. The body was examined on the following day.

On opening the thorax, both pleural cavities were found to contain a large quantity of fluid, from one to two quarts in each; there were no adhesions between the pleural surfaces, with the exception of an elongated band, of some standing, extending from the lower margin of the right lung to the upper surface of the diaphragm; both lungs were emphysematous, but

otherwise healthy. On opening the pericardium, about six ounces of fluid were found; the pericardium was nowhere adherent, but near the apex of the left ventricle there was a patch of lymph as large as a half-crown, capable of being scraped off without injury to the membranes beneath. The cavity of the left ventricle was found much dilated, and the walls thickened; the semilunar valves were thickened, contracted, and covered with large soft vegetations, easily broken up. On tracing the aorta upwards, it was found much dilated, and immediately after the giving off of the innominata artery, between that vessel and the left carotid, there was a pouch, extending upwards as high as the upper bone of the sternum, making pressure on the trachea; this pouch was formed by a dilatation of the aorta. The origin of the left subclavian was surrounded by an almost bony ring, and so much contracted as scarcely to admit the head of an ordinary probe, thus satisfactorily accounting for the indistinct pulse of the left wrist; beyond this contracted portion the artery swelled into a pouch, nearly half an inch in extent, when the vessel became of the ordinary size. The lining membrane of the ascending aorta was thickened and puckered, but not ulcerated; but from the point where the aorta curves to form the arch where the great vessels are given off, and for the first four inches of the descending aorta, the lining membrane was in a state of extensive ulceration; in some patches of the membrane the size of a shilling being entirely eaten through. Occupying the first five inches of the aorta, there was a large firm plug of discoloured lymph, evidently of an existence antecedent to death.

The liver was pale and somewhat hard, otherwise healthy; the kidneys were much congested, of a dark claret colour, easily broken up under pressure, and more resembling the structure of the spleen than that of the healthy kidney.

On removing the skull-cap, the arachnoid covering the hemispheres was found opaque, with a considerable quantity of fluid beneath it; the lateral ventricles were empty; the portion of white matter forming the roof of the right lateral ventricle was extensively softened, so that it could be scraped off with the scalpel like soft putty; the corresponding part on the left side was firm, almost more so than usual, and on slicing the hemispheres, the bloody points were more numerous on the right side than on the left; the basis of the brain presented nothing unusual, but the arteries were all, more or less, in a state of disease, especially the vertebrals and the basilar.

September 30, 1847.

DILATATION OF THE RIGHT AURICLE IN A NEW-BORN INFANT, FATAL ON THE SEVENTH DAY.

By. S. G. Sloman, Esq., Surgeon, Farnham.

Richard Jarrett's infant, born on the 11th of November, 1847, was well formed and apparently healthy at birth. It took the breast well and showed no symptoms of disease until the evening of the third day, (the 14th,) when the nurse noticed that its breathing was somewhat difficult; it had a slight cough and brought up a viscid mucous expectoration, tinged with blood. These symptoms continued throughout the following day.

I was requested to see the infant on the 16th, when I found it suffering from the greatest difficulty of breathing, occasioned by the very copious viscid mucous secretion which it could not get rid of, blocking up the air-passages, and causing such an amount of obstruction to the respiration, as to threaten suffocation; the brain also suffered much from the consequent congestion, and the infant was frequently convulsed. The only relief that it appeared to get during these paroxysms, was by turning it on its abdomen and thus facilitating the getting rid of the mucus. I ordered the infant a warm bath, which afforded some relief; the bowels were very much relaxed, but there was a great deficiency of bile in the excretions; it passed no water; it was unable to feed from the third day.

All the symptoms increased in urgency until the seventh day, when it was attacked with a passive pulmonary hæmorrhage of dark grumous blood, and died very shortly, in the greatest distress, in convulsions.

I made a *post-mortem* examination about thirty-six hours after death, and the following were the appearances:—The infant was of ordinary size, well-formed, and well-nourished, although beginning to waste. On opening the thorax, I found the anterior and superior parts very much congested, particularly the external and internal jugulars; the lungs were small and also very much congested; there was a considerable effusion of serum in the pericardium, and the heart was very much enlarged; the right auricle was dilated to such an extent as to form a loose bag covering the base of the organ, and *very much attenuated;* the right ventricle was dilated, and the auriculo-ventricular opening appeared too large for the valve to close. I could not discover any disease of the valves. The left auricle was also dilated, but the left ventricle presented nothing peculiar; the foramen ovale was closed.

The liver was enormously enlarged and congested, and felt through the parietes, as a large abdominal tumour, extending into the left hypogastric region; the gall-bladder was distended with inspissated bile; the other viscera presented no peculiar appearances, beyond being congested.

I imagine that the cause of death was from the obstruction to the circulation on the right side of the heart, in consequence of the dilatation by attenuation of the right auricle, and thus rendering it incapable of performing its functions. The mother of this child has lost two children before, each having died suddenly when about a fortnight or three weeks old, and according to the account of the friends with much the same symptoms, except the second, which died almost suddenly,—so much so, as to excite some suspicion as to its having died from natural causes, and an inquest was held upon it. I have never attended the mother, but from the account the friends gave me of her state of health, and some symptoms they mentioned, I imagine that she has disease of the heart.

SPONTANEOUS RUPTURE OF THE UTERUS BEFORE LABOUR.

By Thomas F. Brownbilll, Esq., Surgeon to the Salford Workhouse.

M. A. Glover, aged 28 years, was of rather short stature, well proportioned, and had a healthy appearance. She had been married about eight years. In ten months after her marriage, after an ordinary labour of about nine hours' duration, she gave birth to a full-grown female child, which lived about four months. Soon after labour, which I understand was quite natural, she was seized with convulsions, followed by delirium, &c., which, continuing for a week or ten days, subsequently resulted in an attack of puerperal mania, for which she was afterwards admitted into the Manchester Workhouse. Here she remained about two months, and as no improvement had taken place, was then sent to Lancaster Asylum, whence, having been confined seven or eight months, she was discharged cured, and from that until the present time, has enjoyed uninterrupted good health, having been separated from her husband during most of the time since her last confinement. She again became pregnant, and was admitted into the Salford Workhouse on the 4th of November last, in order to lie in.

She stated that in the beginning of the seventh month of gestation, whilst hanging out some clothes, she received a fall, which shook her violently, but did not cause her either then or afterwards any particular pain. On the 20th of November, at 6 a.m., after having passed a restless night, with occasional slight uterine pains, she began to vomit. This was followed by several pretty strong pains, during one of which she experienced (to use her own expression,) a severe crack in the back, with a feeling of something suddenly giving way in her inside, which was immediately followed by a discharge of liquor amnii from the vagina. The widwife, Mrs. Livsey, (an intelligent and experienced person,) was accordingly sent for, and was soon in attendance. She found upon examination the os uteri nearly closed, hard, and incapable of admitting the point of the finger; there was a slight discharge of a dark brown colour from the vagina; the patient had vomited the contents of the stomach, and the pains had altogether subsided. Under these circumstances she left her, and found on her return at 3 p.m., that she had had no pain during her absence; the os uteri was lower down, and more yielding, though not in the least dilated, and a slight discharge of water, tinged with blood, escaped whilst making the examination. She had not slept, nor felt the motion of the child since. Soon after the waters broke. A dose of castor oil was now ordered.

On visiting her the following evening, at the request of Mr. Roberts, the governor of the workhouse, I found the oil had been rejected by the stomach, and the vomiting had continued more or less to the present time, the matter at first being of a greenish yellow, and afterwards of a chocolate colour; labour had not in the least progressed, the os uteri remaining as before, if anything, more contracted; had no pains; complained of being weak and poorly, and although several opiates had at short intervals been administered, she had as yet not slept, and with a feeble pulse, her countenance now began to assume an anxious expression.

Nov. 22nd. About 11 a.m., she began to doze for short periods, but this state soon gave way to extreme restlessness, almost incessantly requiring her position to be altered. She now complained of severe pain in the middle of her back, and her pulse was evidently sinking. Between one and two o'clock her breathing became laborious, her finger nails turned livid, a continued gasping followed, and in this state she died.

The body was inspected twenty-four hours after death, in the presence of several medical friends, and Mr. Roberts, the Governor. The abdomen was found to contain a large quantity (about two pints,) of dark-coloured uncoagulated blood, probably diluted with a portion of the liquor amnii, and this being partially removed, the first object that presented itself, entirely excluded from the womb, and partially covered by the omentum and small intestines, was a full-grown male child, that had evidently been dead several days, the first stage of putrefaction having commenced. On partially removing the child, which lay with its left shoulder to the womb, a large rupture of this organ was observed, extending from the centre of the fundus posteriorly along its whole length as far as the os uteri, leaving only a narrow rim surrounding it, and through which the child had escaped into the cavity of the abdomen. The length of the opening was about seven inches, and the uterus which seemed perfectly healthy, was well contracted over the firmly-adherent placenta.

In the above unfortunate case there are several points worthy of general notice, and which are of peculiar interest to the obstetrician. The patient was at the end of her calculation, and had a well-formed pelvis; the child was full grown, of average size, also well formed, and there existed between the two no disparity which would prevent the one easily passing through the other, supposing the presentation to be natural. From the time she first began to complain, up to her death, there was not the slightest pressure downwards; the os uteri was not at all dilated, and firmly resisted the introduction of the finger point, which effectually prevented me ascertaining the presentation of the child, nor was there any particular point or bulging perceptible in any part surrounding the os uteri, by which I could recognize its position. The os uteri projected downward a little way into the vagina, and above it seemed to lead to an obliterated cervix. Notwithstanding this state of things, from the total absence since the first commencement of anything like strong or bearing down labour pains, even at the time the waters escaped, it never occurred to me that the uterus had probably ruptured, which fact I first discovered at the *post-mortem* examination.

The cause of the rupture is involved in much obscurity. She had not over exerted herself, nor had she received any bodily injury since the time she fell, and the shake the fall occasioned was not followed by any soreness, or other inconvenience. Towards the end of gestation, she was often low spirited, and entertained a presentiment to which she often gave expression, that she should not survive the birth of her child. There was no softening of stricture in the uterus, nor any indications of previous inflammation. The surrounding soft parts were healthy; the usual predisposing and exciting causes were all absent. Even supposing there was mal-position of the fœtus, that the wall of the uterus should be endangered from such

trivial pains seems surprising. The case altogether is remarkable, and it presents an instance of the least, I believe, in frequency,—viz., the longitudinal rupture of this organ extending from the centre of the fundus posteriorly in a straight direction, to within half an inch of the posterior centre of the os uteri.

ON TURNING IN LABOURS RENDERED DIFFICULT BY DISTORTION OF THE PELVIS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Your last number contains some remarks made by Dr. Simpson on my paper, on "Turning in Labours rendered difficult by Distortion of the Pelvis," to be found in your Journal, July 27th, 1847, page 403. Dr. Simpson says, that "Dr. Radford avoids all allusion, by name, or reference at least, to the previous observations I had ventured to offer, &c." I freely admit I did not refer to Dr. Simpson's observations, and the chief ground why I did not do so, was, that Professor Velpeau had first recommended, and upon principle, adopted this practice. I was aware at the same time that Smellie had turned in such cases; I also omitted to mention his name, because I considered Velpeau was entitled to the merit, if any, of first bringing this practice before the profession, and at the same time expounding his reason why he adopted it. Dr. Simpson has kindly spoken of the principle which has influenced me to place value on any practice which can safely supersede the murderous operation of the crotchet, and I can assure him that I shall, as far as my humble efforts go, at all times endeavour to expunge it from our obstetrical code.

Dr. Simpson further says, "He," (Dr. Radford,) "propounds the practice to his readers, as if it were a new and original suggestion on his own part, as far as British midwifery is concerned." In answer to this charge, I can sincerely declare I had no such intention; and I think if Dr. Simpson will take the trouble again to refer to and consider my remarks, he, and all others who carefully read them, will conclude, that they go to guard the practitioner against incautiously adopting this practice, and to point out the uncertainty of accurate *relative* pelvic measurement.

During my practice, I have in several instances heard country practitioners mention that they turned the child when the pelvis was slightly distorted.

To shew that I have long been aware that in some cases of distortion of the pelvis, even when extreme, the child may be brought through in consequence of presenting footling, I will give a short abstract of a case which came before me some years ago, and which, with two or three others which point out the yielding of the pelvic bones, when affected with mollities ossium, during labour, shall be fully reported to the profession.

CASE.—Kitty Banks, residing at Bolton by Bowland, aged 36 years, eighth pregnancy, a patient of Mr. Garstang, of Clithero, from whom all the particulars are derived. December 19th, 1835, Mr. Garstang consulted me on the case. Pelvis distorted from malacosteon; shape trilobed; measures from symphysis pubis to sacrum 2 inches and 4-10ths; from sacrum to the angle formed by the bending of the pubic bones, 1 inch and 2-10ths; across between the approximating pubic bones, 3-4ths of an inch. The largest circle to be described does not exceed 1 inch and 3-10ths. There is little difference in the space on either side. My opinion was that the Cæsarean section would be required, and I offered my services, if necessary. January 8th, 1836. Further consultation. February 9th. A statement received of the termination of the case. February 10th. A more circumstantial report; in labour six to seven hours; liquor amnii discharged; *left foot*, and a coil of a flaccid, pulseless, funis presented; pains very violent, and frequent. The body of the child was forced down, apparently without much difficulty; when the head came to offer, it was deemed right to perforate it, as the child was already dead. It was readily drawn through. The bones of the pelvis were observed to yield during the time of the pressure produced on the child by each pain, and also during its extraction. On removing the placenta, the pelvis was examined, and each bone found to have assumed its previous distorted relative position.

I shall make no further comments now on this case, except to say, that it forms a most important example of the wedge-like shape of the cone of the child, body presenting footling, thereby dilating the softened pelvic bones.

I have the honour to be,

Yours most respectfully,

THOMAS RADFORD.

Manchester, December 17, 1847.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, DECEMBER 29, 1847.

The large portion of the present number, which we are compelled to devote to the Index, renders it impracticable to do more than very briefly refer to a subject of pressing importance. We allude to the proceedings of the Committee of Poor-Law Medical Officers. A notice has been issued by the Committee acknowledging the receipt of many replies to their circular of inquiry, at the same time stating that a large number still remain unreturned. In this notice we find the subjoined passage:—

"It has been intimated to the Committee that some medical men are deterred from sending their answers, by apprehension of the displeasure of the Guardians. As the Committee is engaged in no party or querulous undertaking, and merely asks the statement of facts for the elucidation of truth, it can scarcely believe that it would be doing justice to any Board of Guardians, or to any individual members of such a Board, to admit that they could employ threats or other unworthy influence to prevent the return of the

answers which have been required. But should it happen that any guardian or subordinate officer, through misapprehension, has been induced to employ menaces to prevent the returns being made, the Committee would encourage the subject of such menaces not to allow himself to be intimidated by them, but to rely with confidence in the justice of his cause, and in the full assurance that the best protection against such influence is to be found in tranquil publicity and steady perseverance in the path of duty."

We would fain hope that no such intimidation can be used in this country—that no Board of Guardians, nor any subordinate officer attached to them, would dare thus to interfere with the Englishman's privilege of freely expressing his opinions, and making known his grievances; but under any circumstances there can be no question of the soundness of the advice given by the Committee.

It is requested that the returns may now be sent up with as little delay as possible, and the 7th of January is named as the latest day for reception. It is obvious that the Committee will then have an important and laborious duty to perform in reducing the documents before them into order, in arranging the information which they contain, and in drawing the conclusions which they may afford. The time left for the fitting performance of this duty will not be more than is barely sufficient before the period arrives at which the information thus collected can best be used with effect, and we hope the members of the Provincial Association will not be found wanting in at once sending up the returns applied for.

Proceedings of Societies.

SHEFFIELD MEDICAL SOCIETY.

Seventh Session.—Third Meeting, November 4th, 1847.

Mr. TURTON in the Chair.

DISEASED HEART: JAUNDICE.

Mr. Hunter exhibited the heart of a man aged 70, who had a tumour, (hard, round, and distended,) in the right hypochondrium. The skin was jaundiced; fæces white; urine dark-coloured. No chest symptoms. He died comatose. On examination *post-mortem*, the gall-bladder was found greatly distended with white bile, transparent, and much like lymph; there were many calculi, white, hard, and glazed, in the gall-bag, and one in the common duct; the liver was congested with white bile; the coronary arteries of the heart were extensively ossified, some pieces of bone, being an inch and a half long, embracing the whole artery; the muscular substance of the heart was wasted, soft, and fat.

DILATATION OF THE HEART: DISEASED VALVES.

Dr. de Bartolomé exhibited the heart of a married woman, who had never borne children, aged 44. In May last she became an infirmary patient, suffering from severe dyspepsia. On examination a loud murmur over the aortic valves, accompanying the first sound of the heart, and an indistinct sound of the mitral valve likewise with the first sound. She stated that she had suffered from disease of the heart for some years, and for the last ten months had laboured under diarrhœa, the consequence of want. She remained in the infirmary until the middle of August, when she was discharged relieved, her general health being much improved, and she had gained flesh. The treatment had been directed exclusively to the improvement of her general health, as it was considered that the heart disease was beyond the reach of medicine.

On the 30th of October she died, and was examined on the 1st of November. The left ventricle, and especially the auriculo-ventricular orifice, was very much dilated; around the edges of the mitral valve, and particularly at the apices of the segments, a yellow fibrinous substance was deposited; the aortic valves were puckered, and their free edges rather contracted, and at their root was a deposit of lymph, of long standing; the aortic orifice was preternaturally large, and the arch of the aorta sacculated; the right cavities of the heart were slightly dilated; the lungs hepatized in various places, and much infiltrated, as after intense pneumonia.

Mr. Chesman then detailed two cases of disease of the nostrils:—

INFLAMMATION AND INDURATION OF THE NARES.

A married female, aged 40, childless, of sanguine temperament, came under his care in February, 1846, suffering from an apparently malignant affection of the nose. In 1842 she had, after sudden suppression of menstruation, been attacked with deep-seated and lancinating pains in the hypogastric region; the os uteri was puckered, hard, and extremely sensible to the touch; there was no discharge. This was relieved by leeches, &c., but the pain continued, although subdued. Hot baths were had recourse to, with injections strongly impregnated with the extract of belladonna, with very marked relief. She took the tincture of iodine internally, with other remedies, and after some time she gradually recovered, and the uterus resumed its usual menstrual function. In February, 1846, she again came under treatment for her nose, which presented the following appearance:—A chronic inflammation of the integuments of the apex and dorsum, with small tubercles of an indolent character, and accompanied with lancinating pain. The immediate point of the nose, on its right side, was excavated or fissured, from the indurated and thickened state of the adjoining parts, and gave exit to an acrid discharge which excoriated the contiguous surface. The following ointment was ordered to be used three times a day:—

R. Extr. Conii., dr. j.; Extr. Belladonna, dr. ss.;

Ung. Cetacei, oz. ss. M. Fiat Ung. In addition, an alterative mercurial pill was ordered.

This treatment was continued a week without amendment, when tincture of iodine, and Plummer's pill were exhibited. Six days after the report is no better in any respect. The medicine given was as follows:—

R. Extr. Conii, dr. j.; Iodidi Arsenici, gr. iij; Pulv. Rhei, scr. j. M. et divide in pil., xxiv. Sum. j. nocte maneque. Empl. Lyttæ Nuchæ. To be dressed with savine cerate.

This treatment was continued until the 9th of May, when some irritability of stomach came on, with sickness and general abdominal uneasiness, but this soon disappeared, and she was discharged cured on the 2nd of June.

ULCERATION OF THE SEPTUM NARIUM.

A maltster, aged 46, of a spare attenuated frame, and temperate habits, was attended by Mr. Chesman, in February, 1846, for an attack of general febrile irritation, with coryza. After a short time he recovered with a degree of suffusion and stuffing of the nostrils. Two or three years ago he was accustomed to a scorbutic eruption on the inside of the thigh, attended with a good deal of itching and uneasiness, but which has disappeared since the nostrils became affected.

May 5th. Nostrils examined by means of auroscope, and a small excavated ulcer detected on the left side of the septum, anterior to the vomer, about the size of a pea. General health bad; complains of great weakness; had slight gonorrhœa when a young man. A solution of ten grains of the nitrate of silver to the ounce of water, was brushed freely over the ulcer, and the iodide of potass in Dec. Sarsæ taken internally. Under this treatment he gradually recovered, and omitted the medicines November 28th.]

March 10th, 1847. Has had a recurrence of his catarrh, attended with febrile disturbance. On examining the nostrils the ulcer is found to have perforated the septum; and there is also a small ulcer on each ala, opposite the one on the septum. The nitrate of silver and cathartics were applied.

March 16th. The small ulcers healed, but the one in the septum extended. Continue the application, and take twelve drops of the tincture of iodine.

He continued the same treatment without any diminution in the size of the ulcer, until May 13th, when the ulcer is reported to be extended, and an attack of inflammation of the mucous membrane, nose, eyes, and throat, has come on, which yielded in a few days. His general health was much improved by residing some weeks at the sea side, but as the ulceration continued to increase attended with a resinous incrustation, he took the advantage of a visit to town, to get the opinion of an eminent surgeon. This gentleman reported that after a very long practice, he had only seen a few cases, which gradually had come on very insidiously, producing little disfigurement, and little uneasiness, until advanced; they were generally tedious, but did recover eventually, under the application of the citrine ointment, and the exhibition of sarsaparilla. This treatment has been continued in this case ever since, and the appearance of the nostril remains stationary.

In the discussion that ensued, Mr. Jackson mentioned a case of ulceration and perforation of the septum, where cicatrization took place and ultimately got well, leaving a perforation, under the application of the nitrate of silver. The origin of the mischief could not be ascertained, but it was believed not to be syphilitic, as the bones of the nose did not suffer.

BIRMINGHAM PATHOLOGICAL SOCIETY,

August 5th, 1847.

FREDERICK RYLAND, Esq., in the Chair.

ANEURISM OF THE AORTA.

Mr. Russell exhibited to the Society a heart and portion of the aorta, having two small aneurisms, from the rupture of one of which the patient died.

August 3rd, at half-past three, p.m., I was sent for hurriedly to Mr. G., aged 41. I found him in his bar, in a chair, supported by two men; he was perfectly insensble; his breathing stertorous; hands cold, and pulse scarcely to be felt; pupils contracted. I attempted to give him some brandy, but in the attempt to swallow it he was nearly suffocated; I thought him dying, but in about ten minutes he roused from the irritation of the glottis, excited by the brandy. He complained of intense pain in the bowels, and was very urgent to be allowed to go to the privy; he was dragged thither, but with very little effect. He was then carried to bed, much against his will; he was in dreadful pain in his bowels. Opium, and then opium and æther were given; a mustard plaster and hot bricks were used without benefit; his skin continued cold, pulse scarcely perceptible. I twice listened to the sound of the heart. On the first occasion I could scarcely distinguish any beat; after the patient had somewhat revived I could hear the first sound only. He died at five o'clock, (one hour and a half after the seizure.) He was sensible at times, and made several inquiries after his business concerns. At times his skin was blue. The impression of myself and Dr. Eccles, at first, from the severe pain and blueness, was that it was an attack of severe spasmodic cholera. He was rather a large man, somewhat fat, with a hearty complexion, of regular habits, and good previous health; cannot discover that he complained of any symptoms of disease. He had dined at one o'clock, and after dinner was talking to a friend, when he suddenly fell in a state of insensibility.

Sectio cadaveris fifteen hours after death:—The face had a bluish tinge; nutrition very good; considerable thickness of subcutaneous fat, and a fatty omentum. The intestines were perfectly healthy. On opening the pericardium some dark bloody serum flowed out; a firm clot of dark blood covered the whole outer surface of the right ventricle of the heart; it was about half an inch thick at its thickest part, and became gradually quite thin at its edge; it was raised with perfect ease; no clot on any other part of the heart. On the anterior surface of the aorta, and just above the base of the right ventricle, was a prominence like the umbilicus of a man, about the size of the end of my second finger, and of a deep red colour; when the artery was opened this proved to be a small aneurism

from that vessel, into which the end of my second finger just entered; its walls consisted of the inner and outer arterial coat, the middle coat terminated at the opening into it; in its upper part there was a very fine fissure which was only seen by its enclosing a little blood; the opening thus formed was still partly closed by cellular tissue, not quite separated. In opening the aorta to avoid this aneurism, I unfortunately cut into a second one, somewhat larger, capable of containing a walnut; this was situated about half an inch to the right of the former, and a little lower, opening just above the valves of the artery; the opening into it seemed to have been large enough to admit the first finger freely. This aneurism rested on the base of the heart, and its cavity was, in part, enclosed by the auricle, its walls firm; the middle coat of the artery ceased at the opening into it by a prominent margin; it did not contain any clot, and this circumstance, with its position, preventing any external prominence, caused its existence to be overlooked until the aorta had been opened. The aorta itself was much diseased, a very abundant atheromatous deposit occupied the ascending portion, and was especially abundant around the openings into the aneurisms, but there was nothing like ulceration; the interior of the aneurism was also rendered very uneven by the same deposit. The atheroma continued down the thoracic aorta; in one or two spots it seemed to have completely involved the whole thickening of the middle coat. The valves of the heart were all quite healthy; the left ventricle dilated, and its valves somewhat hypertrophied; rather more fat upon the heart than usual, especially about the origin of the aorta, and on the lower portion of that vessel; in the latter situation I noticed the fat to be unusually dense. The right lung adhered very extensively to the diaphragm, so firmly that it was torn during the process of separation; the left lung was but slightly adherent. The pulmonary tissue was much loaded with dark blood, otherwise healthy. From circumstances the heart was not opened until it had been macerated, hence the contents of the cavities could not be ascertained.

ULCERATION AND RUPTURE OF THE COLON.

Mr. Simons brought before the Society a specimen of stricture of the rectum and a rupture from ulceration of the transverse arch of the colon into the abdominal cavity, taken from the same patient.

W. A., aged 34, who was habitually costive, was taken suddenly on the night of July 30th with violent pain in the bowels. There was no sickness; no distention of abdomen, or *pain upon pressure*; no hernia; he was much excited in his manner; pulse about 100; tongue moist. He had taken great numbers of aperient pills. I ordered fomentations, aperient medicines, and a common enema. Next day he was no better; bowels unrelieved; no sickness; no *pain upon pressure*; pulse 84; tongue moist; complains still of much pain in bowels and borborygmi. For the next six days were used as follows:—Leeches, fomentations, anodyne embrocations, large doses of calomel and opium, croton oil, saline aperients, enemas, warm baths, galvanism, and sudden applications of cold water to the abdomen, and all tried in succession, but without effect. During the whole of this time the pulse was remarkably quiet, never exceeding 96, neither had there been any hardness or distention of the abdomen. On the evening of the sixth day the bowels became tympanitic, and somewhat painful upon pressure in the situation of the transverse arch of the colon. On the morning of the seventh day he was suddenly seized with violent pain in the same situation; the abdomen became much more painful, and very tympanitic; he was sick; his pulse became feeble; his countenance covered with cold perspiration, and he died in a few hours, the bowels having been constipated twelve days.

Upon a *post-mortem* examination there was no appearance of general inflammation in the abdomen, but the arch of the colon, (which had a circumscribed patch of inflammation,) had given way, by a small opening about the size of half a fourpenny-piece, and the contents escaped into the cavity of the abdomen. There was also a stricture of the rectum, about seven inches from the anus, through which you might pass the little finger. All the other viscera healthy.

MEDICAL ETHICS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I have perused with some care, the Bye-Laws of the Manchester Medico-Ethical Association, and beg leave to offer a few remarks upon them. I am an M.D., of an English University, a Member of the College of Surgeons, London, and a Licentiate of the Apothecaries' Company, London, and came to Woolwich, to practise as a physician, having purchased for £300, what I was led to understand was a *bona fide* good practice. I paid my money and was duly introduced to a number of persons as the successor by the physician who preceded me. He then left me, as I thought, in the possession of a good practice. I waited at home for three months, and to my great surprise never had one single call. A member of the Board of Guardians proposed that I should practise then as a general practitioner. He introduced me to the Board and by it I was appointed a medical officer of their Union. In my practice amongst the poor I was more than ordinarily successful; then came some who could pay for my services; finally a greater number, and now I am making a good practice. But all who came to consult me or sent for me to prescribe for and treat them, had some one or other of the numerous practitioners around as their medical attendant. These medical attendants, had I lived here for ever, would never call me in, or allow me a single case of theirs, and all that is very natural; but suppose that I were to act in conformity with these rules and refuse to give my advice or attendance to parties without the sanction of their medical attendant, I should be guilty of an act of suicide. Suppose me guided by their law No. 9, in the second section, I should like to know where would my present practice be? What would my position be now if I conformed to their rule No. 13? I should be without a patient this moment if I acted up to rule 15, divested of the words "officiating friend," for in that position I have never acted. I consider that etiquette by all means should be used, such as one gentleman should shew towards another, but I cannot understand why, if patients prefer my attendance to that of their usual medical attendant, I should refuse to see them, and prescribe according

to the best of my ability, once, or twenty times, if they wish it, without seeking for permission from their former attendant, who never would give such permission, if he could prevent me by witholding it. It is all very well for old long-established practitioners to wish to make laws which will prevent new comers from poaching on their rich preserves—for preserves they have made them hitherto, and would desire to maintain them so; but to a man knowing his profession, and anxious to live honourably by it, and taking the field unaided and single handed against a host of exclusive monopolizing "brethren in arms," (and I mean these words literally,) this nice delicacy, which forbids me to prescribe for a sick man who happened to have the ill-luck to have consulted some less qualified practitioner heretofore, and bids me turn him from my door, is not in accordance with the object I had in view when I entered and followed up my profession.

I have the honour to be, Sir,
Your very obedient Servant,
H. B. B.

TREACLE, A REMEDY FOR BURNS AND SCALDS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The employment of treacle as a dressing for burns and scalds having lately been the object of comment in the *Provincial Medical Journal*, I am actuated by the principle of *palmam qui meruit ferat*, to lay before the members of our Association certain facts relative to the first introduction of this remedy to the notice of the profession, inasmuch as no allusion whatever has been made to the originator of this line of practice by the authors of the different papers that have lately been published in support of it.

On October 13th, 1838, a paper appeared in the *Medical Gazette* from the pen of Dr. Greenhow, of North Shields, in which he detailed "the circumstances which first gave rise to the idea of curing burns, without the intervention of suppuration," by means of an ointment, composed of the Ung. Resin. Flav., and Oleum Terebinth., applied in the melted state, "with a brush or a bunch of feathers, so as to form a complete coating over the burnt surface." It was this paper that elicited from Mr. Jesse Leach, of Heywood, a communication which was inserted in the same periodical, on November 3rd of the same year, entitled, "Treacle, as a Dressing for Burns."

It is, therefore, (so far at least as I have been able to ascertain,) to Mr. Leach that is due the merit of being the first to give publicity to the efficacy of this valuable remedy. In commenting on Dr. Greenhow's plan, he says,—

"In the first and second stages of burns and scalds, I prefer the external use of treacle, which, from its simplicity, readiness of access, comparatively little expense, and almost uniform success, cannot fail to recommend itself to every one. Before trying the use of treacle, I had attempted cold water and spirituous dressings, protected with oiled silk, linseed oil, and lime water, but frequently failed in preventing the smarting burning pain arising from the sensitive state of the cutaneous nerves, till it occurred to me that treacle, being a tenacious, plastic, refrigerant liquid, when pure, would effectually exclude atmospherical air, whilst it would astringe and cool the inflamed part. The last case I used it in was attended with marked success; since then I have tried it in sixty-five cases, and with variable effects. Three things are necessary in its employment. First, that it should be free from sand, splinters of wood, and dirty water, with some of which it is commonly adulterated; secondly, that it should be spread upon fine bleached calico, without any asperities from uneven threads; and thirdly, that it should be cold. When used in this way I have frequently seen the most agonizing pain immediately cease, and turgescence of the inflamed skin diminish. In mild cases one dressing will suffice. Where vesication is large and extensive, I have frequently evacuated the contents by means of a fine-pointed needle, avoiding laceration of the detached skin, but oftener prefer a thick coating of the treacle upon the part, and afterwards enveloped with tissue paper, which, from the delicacy of its structure, will sooner tear than suffer the raised epidermis to be detached. In common cases, where the burn is slight, I spread the treacle upon fine calico, and apply it after M. Velpeau's plan around the affected part. Where calico of the description mentioned is not to be obtained, I use paper, with similar results. Where destruction of the skin has taken place, and the part has become a sore, I have thought treacle promoted suppuration and retarded the cure, &c."

Mr. Bulley's mode of using the treacle dressing differs from the above in this, that it is applied in a diluted state, (one part to three of water,) and at a temperature of 98°, by means of lint, which is changed night and morning, "having been kept moist during the day by occasional saturation with the mixture of the same temperature;"* and he remarks, in concluding his paper, that "it is but right to mention, that in the year 1838 Dr. Greenhow, of North Shields, published an account of the action of treacle alone in excluding air from burnt surfaces, and in some way modifying the subsequent suppuration; but I was not aware of his having done so until some time after I had used it in a *diluted* form, and with different objects to those proposed."†

Dr. Payne's plan resembles that of Mr. Leach,—that is, the treacle is applied pure, and at the natural temperature, and afterwards covered with folds of well-aired linen.

I have not tried this remedy myself, but I may state that in a few cases which have come under my notice, I have found an article that I have myself introduced,—viz., the "Impermeable Piline," of very great benefit in burns of the first degree; it has more speedily relieved the pain, and reduced the inflammation, and more rapidly caused the absorption of the effused serum in those of the second degree than any other remedy I have ever before employed. Moreover, it has the great advantage of *effectually* protecting the injured part from the contact of the atmosphere.

I am, Sir, yours truly,
A. MARKWICK.

19, Langham Place,
November 30, 1847.

* I cannot refrain from alluding in this place to the great value of the "spongio piline" as a vehicle for fluids where *moisture* is required to be *retained* for several hours, without the trouble of renewing or re-moistening the application.—A. M.

† I have not been able to find this paper of Dr. Greenhow's. —A. M.

SPONTANEOUS COMBUSTION.

It has not unfrequently happened that spontaneous combustion has given rise to unfounded suspicion of homicide. The following is an instance in point:—

On the 6th of January the corpse of a man was found burning on his bed, by an attendant who entered his room in the morning. A thick smoke filled the chamber, and a small white flame was seen to play about the body. The bed-clothes were almost destroyed, and the bedstead had become charred. It was ascertained that the deceased had carried lucifer matches in his pocket, and had as was his custom placed a hot brick, wrapped in flannel, to his feet. He retired to bed about 7 o'clock in the evening and at 9 o'clock, his daughter, who passed by the door, perceived nothing unusual. The man, who was 71 years of age, was neither fat nor intemperate.

The son and daughter were suspected of having destroyed their parent, and of attempting to burn the corpse in order to conceal their crime. A physician was summoned to the inquest, and the corpse which had been buried was exhumed. The body was enveloped in a white shroud, and was moist in certain spots. Around the neck was a cravat which was much injured by fire, as was also a piece of his shirt. The hands were completely burned, with the exception of a few remains of the tendons. The thighs were also completely separated from the body. It was determined that these results could not have been produced by the, application of fire, but were due to spontaneous combustion.—*Gazette Médicale.*

BURNS.

From what I have seen in the practice of others, and from my own experience of many years, I do not hesitate to say that frequent dressings are decidedly mischevious, and that bandaging which approaches only to moderate firmness is hurtful. I consider it bad practice hastily to repress the growth of luxuriant granulations, and I know that neither seams, cicatrices, nor contractions, are bettered by the one or the other. Moreover, I verily believe, that debility, leanness, and death, are often the consequences of too frequent and of course unnecessary interference.

A MEMBER.

Medical Intelligence.

APPOINTMENTS.

Philip Henry Williams, Esq., M.D., has been elected one of the Physicians to the Worcester Dispensary, in the room of Dr. Hastings, resigned.

Dr. Arthur Farre, and Mr. Toynbee, have been appointed by the Government to inspect the Workhouses and Infirmaries in the parishes of the metropolis, to determine the amount of accommodation for pauper-patients in the event of the cholera breaking out in London.

ACADEMIE DE MEDICINE, PARIS.

M. Royer Collard has been elected President of this Institution; M. Velpeau, Vice-president; M. Melier, Secretary; and M. M. Begin, Bricheteau, and Cornac, Members of the Council of Administration for the ensuing year.

UNIVERSITY COLLEGE, LONDON.

The munificent legacy of £25,000 has been left to the medical department of University College, London, by the late Dr. Holme, of Manchester.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.

The Association now consists of seventy-three members, and a considerable increase is anticipated on the first ballot in February next. The following gentlemen were appointed Officers on Thursday, December 9th, 1847:—

President:—Dr. Bardsley.

Vice Presidents:—Dr. J. L. Bardsley; W. J. Willson, Esq.

Treasurer:—John Windsor, Esq.

Hon. Secretaries:—Richard Allen, Esq.; Dr. Aikenhead.

Committee:—Mr. Dorrington, Mr. Noble, Dr. Howard, Mr. Crompton, Dr. Radford, Mr. Roberton, Mr. Mellor, Dr. H. Browne, Mr. Southam, Mr. Ker, Mr. Nursaw, Mr. P. Barrow, Mr. Hutchinson, Mr. Greaves, Dr. Harland, Mr. E. Stephens, Manchester; Mr. Fawcett, Oldham; Mr. Flint, Stockport; Mr. Lallemand, Macclesfield; Mr. Wood, Ashton-under-Lyne.

ROYAL COLLEGE OF SURGEONS.

The following Members of the College were admitted to the Fellowship on Thursday, December 16th:—E. S. Warry, Lyndhurst, Hampshire; J. Cockle, Guildford Street; C. Radford, Uckfield, Sussex; J. S. Bartrum, Gay Street, Bath; T. S. Beck, Upper Mary-le-bone Street; W. Clapp, Greenwich; D. De B. Hovell, Clapton; J. W. Fletcher, Bengal Army; T. Callaway, jun., Wellington Street, Southwark.

Gentlemen admitted Members on Friday, December 17th, 1847:—W. Coosby; J. Bennett; W. Fuller; W. S. Falls; F. Glenton; R. Calthurst; C. W. Price; A. Barton; T. S. Hodges.

Gentlemen admitted Members on Monday, Dec. 20th, 1847:—F. P. Francis; T. Crowther; S. B. Birch; G. E. Gains; F. J. Barton; J. Barrow; M. H. Ashwell; J. S. Gundry; T. P. Rust; C. F. A. Courtney; G. Welford; J. Graham; W. Parry; W. C. Orford; J. F. Ollard.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, December 16, 1847:—Alexander George Cockburn Thiselton, Heworth, Yorkshire; Gustavus Irwin Knight, Tilbury Fort; Horace Harrison Smith, Ramsgate; William Henry White, Stevenage; Hugh Green, Boxford, Suffolk.

OBITUARY.

Died, November 29th, aged 80, of fever, Edward Kingsley, Esq., Medical Attendant to the Fever Hospital, at Templemore.

December 5th, aged 75, William Dalrymple, Esq., for many years one of the most distinguished surgeons of the Norfolk and Norwich Hospital, and at the time of his decease Honorary Consulting Surgeon to the same. Mr. Dalrymple was one of the originators of the Museum of the Norfolk and Norwich Hospital, and presented to that Institution the whole of his valuable anatomical and pathological collections.

BOOKS RECEIVED.

Answer to the Religious Objections advanced against the Employment of Anæsthetic Agents in Midwifery and Surgery. By J. Y. Simpson, M.D., F.R.S.E., Professor of Midwifery in the University of Edinburgh, and Physician-Accoucheur to Her Majesty in Scotland. Edinburgh: Sutherland and Knox. 1847. 8vo. pp. 22.

The Sanitary Condition of Great Yarmouth, &c. By C. Lockhart Robertson, M.D., &c. Yarmouth: Barber. 1847.

METEOROLOGICAL JOURNALS FOR SEPTEMBER, 1847.

Kept at Sidmouth, by W. H. Cullen, M.D.; at Honiton, by Mr. Rogers; at Romsey, Hants, by F. Buckell, Esq.; at Uckfield, Sussex, by C. L. Prince, Esq.

		Sidmouth.	Honiton.	Romsey.	Uckfield.
External Thermometer.	Mean at 9 a.m.	54.32	52.15	52.33	.
	,, at 9 p.m.	52.93	8p.m. 48.39	48.39	.
	,, of the Maxima	63.35	60.33	64.13	66.02
	,, of the Minima	48.65	45.14	44.43	42.40
	Absolute Mean	54.75	52.73	54.28	54.21
	Mean of 6 preceding years	57.04	.	.	.
	Extreme highest	1st 67.50	22nd 66.00	9th 70.00	8th 75.00
	,, lowest	5-7th 41.25	19th 36.00	28th 34.00	6th 31.00
	,, range	26.25	30.00	36.00	44.00
	Mean daily range	15.75	14.19	20.90	23.62
	Greatest ditto	23.50	.	25th 30.00	.
	Least ditto	7.50	.	13th 4.00	.
	Maximum in the Sun	.		.	8th 88.00
	Minimum on the Grass	.	.	.	7th 25.00
Barometer.	Mean at 9 a.m.	30.193	29.51	29.434	29.92
	,, 9 p.m.	30.160	8p.m. 29.18	29.390	.
	Extreme highest	27th 30.453	28th 29.81	28th 29.750	29th 30.32
	,, lowest	16th 29.640	17th 28.94	17th 28.790	16th 29.49
	,, range	.813	.87	.960	.83
Dew Point.	Mean at 9 a.m.	50.60	.	50.43	48.39
	,, 9 p.m.	49.00	.	47.61	. .
	Days fine	16	14	17	.
	,, dull and variable	6	.	.	.
	,, on which any rain fell	8	16	13	.
	Quantity of rain in inches	0.396	.	1.133	1.80
	Evaporation	.	.	2.110	2.85
	Thunder and lightning		.		.
	Prevailing Winds	SW. NW.	NW. SW.	NW. SW.	W.

TO CORRESPONDENTS.

Communications have been received from Mr. R. Allen; Dr. Ogier Ward; Dr. Radford; Mr. F. Buckell; Mr. Martin; the Birmingham Pathological Society; Dr. J. F. Hensley; Mr. S. J. Salter; Mr. T. Hunt; Mr. S. Crompton; Dr. Oke; Professor Simpson.

We have to solicit the indulgence of several of our contributors whose communications, in consequence of the room occupied by the index, are unavoidably postponed until the next number.